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LA JOLLA, CA 92038
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SOUTHWEST FISHERIES SCIENCE CENTER

SOUTHWEST FISHERIES SCIENCE CENTER

P.O. BOX 271

FEBRUARY 1998

NATIONAL MARINE FISHERIES SERVICE

CURRENT YEAR OPERATION PLANS FOR FISCAL YEAR 1998

By

Staff of the Southwest Fisheries Science Center

Compiled by

N.L. La Roche, E.M. Perez, and D.J. Mackett

ADMINISTRATIVE REPORT LJ-98-02

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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

SOUTHWEST FISHERIES SCIENCE CENTER

CURRENT YEAR OPERATING PLANS

FISCAL YEAR 1998

This report presents the FY 1998 Current Year Operating Plans (CYOPs) of the Southwest Fisheries Science Center. Budget summaries for each Task and for each office and laboratory are also presented.

The CYOPs set out the objectives, methodology, resources, activities, events and milestones for each project (Task) that was undertaken by the Center during the fiscal year. In several cases, two or more Tasks may constitute elements of a larger program.

Tasks financed from "base" funds of the Center are all represented; however, a refundable project is also included in the last section.

The CYOPs are plans and, as such, represent the best estimates that the staff could make at the time of their preparation. The user is cautioned to use the data only as estimates; details of budget or program changes put into effect since the plans were prepared can be obtained from the Center Director.

Also, the information concerning detailed allocations among the budget classes (labor, contracts, travel, etc.) is presented. However, one is cautioned not to use the budget data for any need requiring precise figures about expenditures. If such information is required it also can be obtained from the Center Director.

David J. Mackett, Planning Officer
Southwest Fisheries Science Center
P.O. Box 271
La Jolla, California 92038
February, 1998

**NOAA FISHERIES
SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN
BASE FUNDING (\$K)
FY 98**

CYOP	TASK	LEADER	PPA	TASK DESCRIPTION	LABOR/			TOTAL
					FTE	TRAINING	OTHER	
(ORG: FR6000) SCIENCE DIRECTOR'S OFFICE								
S040	9WGN4001	NEAL		GENERAL SUPPORT - CENTER DIRECTOR	4.00	359.1	66.0	425.1
				S040 TOTAL	4.00	359.1	66.0	425.1
S054	8L3BA1PA	NEAL	Y	HI FISH DEV AQUACULTURE (FY 1998)	0.00	0.0	452.2	452.2
				S054 TOTAL	0.00	0.0	452.2	452.2
S055	8L1A1CPA	NEAL	Y	HAWAII STOCK MGMT (FY 1998)	0.00	0.0	474.0	474.0
				S055 TOTAL	0.00	0.0	474.0	474.0
S056	8L2APTPA	NEAL	Y	PACIFIC TUNA/BILLFISH (FY 1998)	0.00	0.0	1,395.0	1,395.0
				S056 TOTAL	0.00	0.0	1,395.0	1,395.0
				FR6000 TOTAL	4.00	359.1	2,387.2	2,746.3
(ORG: FR6010) OPERATIONS, MANAGEMENT AND INFORMATION SERVICES STAFF								
S050	9WGN4003	MACKETT		PLANNING SUPPORT	1.00	105.0	6.0	111.0
				S050 TOTAL	1.00	105.0	6.0	111.0
S051	8L1AEC50	STEFANI	Y	SAFETY AND ENVIRONMENTAL COMPLIANCE	1.00	68.2	17.8	86.0
S051	8L1C1AM2	LOSEY		LA JOLLA LIBRARY	1.00	54.8	112.8	167.6
S051	8L1C1AM3	RODRIGUEZ		EDITORIAL SERVICES	1.00	47.4	12.5	59.9
S051	8L1C1AM4	ALLEN		ILLUSTRATIVE SERVICES	2.25	139.8	20.0	159.8
S051	8L1C1AUN	HOSTLER		UNEMPLOYMENT	0.00	25.0	6.0	31.0
S051	9WGN4005	ENGSTRAND		OPERATIONS AND MANAGEMENT SUPPORT	7.00	353.1	152.7	505.8
S051	9WGN4006	MARROW		BLDG & GROUNDS - LA JOLLA	2.00	99.3	329.0	428.3
S051	9WGN4008	HOSTLER		HUMAN RESOURCES/DIVERSITY	0.00	0.0	6.0	6.0
				S051 TOTAL	14.25	787.6	656.8	1,444.4
S052	8L1C1A02	BISTODEAU		INFORMATION TECHNOLOGY SUPPORT	5.00	296.0	114.0	410.0
S052	8L1C1CLJ	BISTODEAU	Y	FISHERIES INFO. TECHNOLOGY - LA JOLLA	0.00	0.0	50.0	50.0
				S052 TOTAL	5.00	296.0	164.0	460.0
				FR6010 TOTAL	20.25	1,188.6	826.8	2,015.4
(ORG: FR6020) SENIOR SCIENTIST								
S060	8L1APRP1	PERRIN W	Y	SENIOR SCIENTIST	1.00	122.4	26.1	148.5
				S060 TOTAL	1.00	122.4	26.1	148.5
				FR6020 TOTAL	1.00	122.4	26.1	148.5
(ORG: FR6100) COASTAL FISHERIES RESOURCES DIVISION								
S301	8L1A3A30	HUNTER		POP BIO OF FISHES - GENERAL	4.00	260.9	54.7	315.6
S301	8L1A3A31	VETTER		POPULATION OF BIO OF FISHES	3.00	171.9	29.1	201.0
				S301 TOTAL	7.00	432.8	83.8	516.6
S304	8L1A4B32	LYNN		FISHERIES ENVIRONMENT INVES	3.00	208.7	5.9	214.6
				S304 TOTAL	3.00	208.7	5.9	214.6
S318	8L1A3A33	MOSER		ECOLOGY/SYSTEMATICS OF FISHES	5.00	319.4	23.2	342.6
				S318 TOTAL	5.00	319.4	23.2	342.6
S319	8L1A6A34	CHARTER R		COASTAL & PAC FISH RES INV	7.60	464.0	64.5	528.5
				S319 TOTAL	7.60	464.0	64.5	528.5
S320	8L1A6A35	SMITH P		SURVEY SYSTEMS DEV	3.00	275.4	53.2	328.6
				S320 TOTAL	3.00	275.4	53.2	328.6
S330	8L1C2A30	JACOBSON L		COMM & REC FISH RES FOR MGT	3.00	261.8	35.4	297.2
				S330 TOTAL	3.00	261.8	35.4	297.2
				FR6100 TOTAL	28.60	1,962.1	266.0	2,228.1

NOAA FISHERIES
SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN
BASE FUNDING (\$K)
FY 98

CYOP	TASK	LEADER	PPA	TASK DESCRIPTION	LABOR/			
					FTE	TRAINING	OTHER	TOTAL
(ORG: FR6200) PELAGIC FISHERIES RESOURCES DIVISION								
S401	8L1A6A40	BARTOO		ALBACORE & SHARKS INVESTIGATION	4.00	288.4	169.2	457.6
S401	8L1A6A41	BARTOO		BILLFISH INVESTIGATION	1.00	65.9	6.6	72.5
				S401 TOTAL	5.00	354.3	175.8	530.1
S411	8L1A6A42	COAN		LARGE PELAGICS DATA SYSTEMS	5.00	263.4	54.7	318.1
S411	8L1C1V40	COAN		BY-CATCH DATA SYSTEMS	3.00	176.7	0.5	177.2
				S411 TOTAL	8.00	440.1	55.2	495.3
S421	8L1C1AM8	SAKAGAWA		PELAGIC FISHERIES EVALUATION	2.00	161.1	40.4	201.5
S421	8L1C1AM9	SAKAGAWA		TROPICAL TUNA INVESTIGATIONS	0.00	0.0	7.6	7.6
				S421 TOTAL	2.00	161.1	48.0	209.1
				FR6200 TOTAL	15.00	955.5	279.0	1,234.5
(ORG: FR6300) MARINE MAMMAL DIVISION								
S500	8L1C4V50	BROWNELL		MARINE MAMMAL ADMINISTRATION	4.00	275.7	26.1	301.8
				S500 TOTAL	4.00	275.7	26.1	301.8
S510	8L1C4V51	GERRODETTE		MM STOCK ASSESSMENT	1.00	91.2	14.0	105.2
				S510 TOTAL	1.00	91.2	14.0	105.2
S520	8L1A5V52	DIZON		POPULATION IDENTITY	4.00	286.2	30.5	316.7
				S520 TOTAL	4.00	286.2	30.5	316.7
S530	8L1A6A53	REILLY		CETACEAN ECOLOGY	5.00	324.1	18.2	342.3
				S530 TOTAL	5.00	324.1	18.2	342.3
S540	8L1A5V54	BARLOW		COASTAL MARINE MAMMALS	4.00	257.7	15.2	272.9
				S540 TOTAL	4.00	257.7	15.2	272.9
S550	8L1ADTPA	EDWARDS	Y	DOLPHIN-SAFE RESEARCH	2.70	193.4	78.0	271.4
				S550 TOTAL	2.70	193.4	78.0	271.4
S560	8L1A5V51	PERRYMAN		PHOTOGRAMMETRY	3.00	171.3	19.0	190.3
				S560 TOTAL	3.00	171.3	19.0	190.3
				FR6300 TOTAL	23.70	1,599.6	201.0	1,800.6
(ORG: FR6400) ANTARCTIC ECOSYSTEM RESEARCH GROUP								
S160	8L1A5H60	HEWITT	Y	AMLR VESSEL SUPPORT	0.00	0.0	1,952.0	1,952.0
				S160 TOTAL	0.00	0.0	1,952.0	1,952.0
S601	8L1A6H60	HOLT	Y	ECOSYSTEM MONITORING	2.00	159.9	58.5	218.4
S601	8L1A6H61	HEWITT	Y	ANTARCTIC KRILL STOCK ASSESSMENT	3.00	224.2	42.0	266.2
S601	8L1A6H62	HOLT	Y	FISH/KRILL POP DYNAMICS	1.75	102.4	7.2	109.6
S601	8L1A6H63	HEWITT	Y	FIELD OPERATIONS	0.00	0.0	305.4	305.4
S601	8L1A6H64	HOLT	Y	PREDATOR MONITORING	1.00	79.6	157.9	237.5
				S601 TOTAL	7.75	566.1	571.0	1,137.1
				FR6400 TOTAL	7.75	566.1	2,523.0	3,089.1
(ORG: FR6500) HONOLULU LABORATORY								
S700	8L1A1A75	DOLLAR		KEWALO RESEARCH FACILITY	0.00	0.0	10.0	10.0
S700	8L1A7A71	LAURS		ADMINISTRATION - OPERATION	0.00	0.0	123.4	123.4
S700	8L1C1A71	TIEMAN		COMPUTER AND LIBRARY SERVICES	5.62	315.6	58.7	374.3
S700	8L1C1CHL	TIEMAN	Y	FISHERIES INFO. TECHNOLOGY - HONOLULU	0.98	65.0	0.0	65.0
S700	9WGN4070	LAURS		DIRECTOR'S OFFICE - HONOLULU	2.00	184.3	20.0	204.3
S700	9WGN4071	LAURS		ADMINISTRATIVE SUPPORT - HONOLULU	7.00	344.4	513.0	857.4
S700	8L2ASM70	LAURS	Y	SWORDFISH RESEARCH	0.00	0.0	390.0	390.0
				S700 TOTAL	15.60	909.3	1,115.1	2,024.4

**NOAA FISHERIES
SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN
BASE FUNDING (\$K)
FY 98**

CYOP	TASK	LEADER	PPA	TASK DESCRIPTION	LABOR/			TOTAL
					FTE	TRAINING	OTHER	
S701	8L1C2A74	POOLEY		FISHERY MONITORING AND ECONOMICS	5.00	266.4	23.5	289.9
S701	8L1C2A76	HAMM		FISHERY DATA MANAGEMENT	3.10	170.2	2.0	172.2
S701 TOTAL					8.10	436.6	25.5	462.1
S702	8L1A4B74	POLOVINA		ECOSYSTEM & HABITAT PROGRAM	2.00	122.2	8.7	130.9
S702	8L1A6A71	BOGGS		FISH BIOLOGY AND ECOLOGY	5.75	412.0	8.6	420.6
S702	8L1A6A73	DEMARTINI		LIFE HISTORY	6.00	354.3	4.2	358.5
S702	8L1A6A77	LAURS		CRUISE EXPENSES	0.00	66.0	0.0	66.0
S702	8L1A7A70	WETHERALL		STOCK ASSESSMENT	3.75	354.8	48.4	403.2
S702	8L1C5A73	POLOVINA		FISHERIES OCEANOGRAPHY/ECOSYSTEM RESEARC	2.00	167.7	22.5	190.2
S702 TOTAL					19.50	1,477.0	92.4	1,569.4
S703	8L1AMS77	ANTONELIS	Y	MARINE MAMMAL RESEARCH PROGRAM	6.10	368.6	105.4	474.0
S703 TOTAL					6.10	368.6	105.4	474.0
S704	8L1AHT79	BALAZS	Y	MARINE TURTLE RESEARCH PROGRAM	1.25	111.5	124.5	236.0
S704 TOTAL					1.25	111.5	124.5	236.0
FR6500 TOTAL					50.55	3,303.0	1,462.9	4,765.9

(ORG: FR6600) TIBURON LABORATORY

S800	9WGN4080	MACCALL		GENERAL SUPPORT - TIBURON	4.50	215.2	121.0	336.2
S800 TOTAL					4.50	215.2	121.0	336.2
S811	8L1AGF81	RALSTON	Y	GROUND FISH ANALYSIS INVESTIGATION (PPA)	7.00	489.7	69.6	559.3
S811	8L1C2A80	RALSTON		GROUND FISH ANALYSIS INVESTIGATION	0.00	0.0	37.6	37.6
S811 TOTAL					7.00	489.7	107.2	596.9
S812	8L1AGF80	HOBSON	Y	COASTAL COMMUNITIES (PPA)	2.50	202.4	5.0	207.4
S812	8L1C3A81	HOBSON		COASTAL COMMUNITIES INVESTIGATION	2.50	139.7	20.0	159.7
S812	8L2BRS82	ADAMS	Y	ESA SALMON--ASSESSMENT/LABOR	2.00	95.4	24.6	120.0
S812 TOTAL					7.00	437.5	49.6	487.1
S813	8L1C3A82	ELDRIDGE		PHYSIOLOGICAL ECOLOGY INVESTIGATION	4.00	296.7	55.0	351.7
S813 TOTAL					4.00	296.7	55.0	351.7
S814	8L1ARA85	MACCALL	Y	IMPROVE STOCK ASSESSMENT	1.00	96.8	10.0	106.8
S814	8L1C3A83	MACCALL		FISHERY MANAGEMENT ADVISORY	1.00	72.9		72.9
S814	8L2BRS80	MACCALL	Y	FOREST PLAN (PPA)	2.00	121.1	50.4	171.5
S814	8L2BRS81	PRAGER	Y	ESA SALMON--ANALYSIS/LABOR	1.00	58.5	80.0	138.5
S814 TOTAL					5.00	349.3	140.4	489.7
S821	8L1ARA86	DIRECTOR	Y	STOCK ASSESSMENT	0.50	47.5	13.9	61.4
S821	8L1C3A84	MAYO		INFORMATION TECHNOLOGY & PLANNING	0.90	53.3	57.0	110.3
S821	8L1C3A86	MACCALL		TIBURON LIBRARY	0.80	36.1	24.0	60.1
S821 TOTAL					2.20	136.9	94.9	231.8
FR6600 TOTAL					29.70	1,925.3	568.1	2,493.4

(ORG: FR6700) PACIFIC FISHERIES ENVIRONMENTAL LABORATORY

S900	8L2BRS90	BOEHLERT	Y	ESA SALMON	0.76	46.9	35.4	82.3
S900 TOTAL					0.76	46.9	35.4	82.3
S901	8L1C1CPL	BOEHLERT	Y	FISHERIES INFO. TECHNOLOGY - PFEL	0.70	50.0	0.0	50.0
S901	8L1C5B90	BOEHLERT		FISHERY OCEANOGRPHY & ECOSYSTEM	2.80	181.4	158.5	339.9
S901	8L1C5B91	PARRISH		FISHERY ENVIRONMENT	2.88	200.9	22.0	222.9
S901	8L1C5B92	MENDELSSOHN		FISHERY CLIMATOLOGY	1.00	96.5	9.0	105.5
S901	8L1C5B93	SCHWING		PHYSICAL OCEANOGRAPHY	2.00	150.3	20.5	170.8

**NOAA FISHERIES
SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN
BASE FUNDING (\$K)
FY 98**

CYOP	TASK	LEADER	PPA TASK DESCRIPTION	LABOR/			TOTAL
				FTE	TRAINING	OTHER	
S901	8L1C5B94	BOEHLERT	NMFS IT FUNDING (FROM BASE) - PFEL	0.30	21.9	0.0	21.9
S901 TOTAL				9.68	701.0	210.0	911.0
FR6700 TOTAL				10.44	747.9	245.4	993.3
GRAND TOTAL				190.99	12,729.6	8,785.5	21,515.1



**NOAA FISHERIES
SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN
SELECTED MISCELLANEOUS/REFUNDABLE PROJECTS (\$K)
FY 98**

CYOP	TASK	LEADER	PPA	TASK DESCRIPTION	LABOR/			TOTAL
					FTE	TRAINING	OTHER	
S040	9WGN4060	NEAL		AWARDS - OMI/CD		22.2		22.2
S130	9WGN4061	NEAL		AWARDS - CFRD		16.1		16.1
S140	9WGN4062	NEAL		AWARDS - PFRD		8.8		8.8
S150	9WGN4063	NEAL		AWARDS - MMD		12.6		12.6
S170	9WGN4065	NEAL		AWARDS - HONOLULU		22.9		22.9
S173	8L1C1A75	HAMM		WPACFIN	2.5	147.8	8.0	155.8
S180	9WGN4066	NEAL		AWARDS - TIBURON		4.8		4.8
S190	9WGN4067	NEAL		AWARDS - PFEL		5.4		5.4
GRAND TOTAL					2.5	240.6	8.0	248.6



Science Director's Office



**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S040	CYOP TITLE:	SCIENCE DIRECTOR		
TASK#:	9WGN4001	TASK TITLE:	GENERAL SUPPORT - CENTER DIRECTOR	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
NEAL	RICHARD	A	15 0	1	
TILLMAN	MICHAEL		4 4	1	
TROIAN	ROSEMARY	A	8 9	1	
LA ROCHE	NANCY	L	7 10	1	

TOTAL LABOR (\$K) (1100):	295.3
TOTAL PREMIUM PAY (1150):	1.0
TOTAL EC (1210):	62.0
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.8
TOTAL TASK (\$K):	359.1

(OTHER OBJECTS EXPENSES)

OP: 040		Lab/Div: Center Directorate		CYOP Title: Science Director	
e Prepared: 11/25/97		Current Year Task #: 9WGN4001		Task Title: General Support - Center Director	
k Leader: Neal		Prior Year Task #: 9WGN4001			

21	TRAVEL	COSTS		25	CONTRACTS	COSTS
	Domestic:	20.0K			Training:	
					Contracts:	
	Foreign:	10.0K				
TOTAL TRAVEL =		30.0K		TOTAL CONTRACTS =		

22	TRANSPORTATION OF THINGS	COSTS		TOTAL CONTRACTS =		
	Shipping	1.5K		26	SUPPLIES (List major expenses)	COSTS
					Office and computer supplies	15.0K
TOTAL TRANSPORTATION =		1.5K		TOTAL SUPPLIES =		15.0K

23	RENTS, COMM., UTIL			31	EQUIPMENT (List major items)	COSTS	
	Postage, Federal Express	4.0K			Office and computer equipment	15.0K	
TOTAL R-C-U =		4.0K			TOTAL EQUIPMENT =		15.0K

23C	COMPUTER	COSTS		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Gov. Owned/Leased:					
	Contracted:					
TOTAL COMPUTER =				TOTAL G & C-O =		

24	PRINTING	COSTS				
		.5K				
TOTAL PRINTING =		.5K				

TOTAL OTHER OBJECTS

\$66.0K

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

CYOP: 054		Lab/Div: Center		CYOP Title: HI Fisheries Development Aqua (PPA) - OI	
Date Prepared: 11/25/97		Current Year Task #: 8L3BA1PA		Task Title: HI Fisheries Development Aqua (PPA) - OI	
Task Leader: Neal		Prior Year Task #: 8L3BA1PA			

21	TRAVEL	COSTS		25	CONTRACTS	COSTS
	Domestic:				Training:	
					Contracts:	
	Foreign:					
TOTAL TRAVEL =				TOTAL CONTRACTS =		
22	TRANSPORTATION OF THINGS	COSTS		TOTAL CONTRACTS =		
				26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =				TOTAL SUPPLIES =		
23	RENTS, COMM., UTIL			31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =						
23C	COMPUTER	COSTS		TOTAL EQUIPMENT =		
	Gov. Owned/Leased:			41	GRANTS & CO-OP AGREEMENTS	COSTS
						452.2
	Contracted:					
TOTAL COMPUTER =				TOTAL G & C-O =		
24	PRINTING	COSTS		TOTAL G & C-O =		
				452.2		
TOTAL PRINTING =						

TOTAL OTHER OBJECTS	\$ 452.2
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SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

OP: 055		Lab/Div: Center		CYOP Title: HI Stock Management (PPA) - OI	
e Prepared: 11/25/97		Current Year Task #: 8L1A1CPA		Task Title: HI Stock Management (PPA) - OI	
k Leader: Neal		Prior Year Task #: 8L1A1CPA			

21	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:			Training:	
				Contracts:	
	Foreign:				
TOTAL TRAVEL =					

22	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
			26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =					
TOTAL R-C-U =			TOTAL SUPPLIES =		

23	RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =					

23C	COMPUTER	COSTS	TOTAL EQUIPMENT =		
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
					474.0
	Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O = 474.0		

24	PRINTING	COSTS			
TOTAL PRINTING =					

TOTAL OTHER OBJECTS	\$ 474.0
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SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

CYOP: 056		Lab/Div: Center		CYOP Title: Pacific Tuna/Billfish Mgmt (PPA) - JIMAR	
Prepared: 11/25/97		Current Year Task #: 8L2APTPA		Task Title: Pacific Tuna/Billfish Mgmt (PPA) - JIMAR	
Project Leader: Neal		Prior Year Task #: 8L2APTPA			

21	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:			Training:	
				Contracts:	
	Foreign:				
TOTAL TRAVEL =			TOTAL CONTRACTS =		

22	TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =		

23	RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =			TOTAL EQUIPMENT =		

23C	COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
	Gov. Owned/Leased:				1,395.0
	Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =		1,395.0

24	PRINTING	COSTS	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 85%; text-align: right;">TOTAL OTHER OBJECTS</td> <td style="width: 15%; text-align: center;">\$1,395.0</td> </tr> </table>			TOTAL OTHER OBJECTS	\$1,395.0
TOTAL OTHER OBJECTS	\$1,395.0						
TOTAL PRINTING =							



***Operations, Management and
Information***

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S050	CYOP TITLE:	OMI - PLANNING SUPPORT - LA JOLLA	
TASK#:	9WGN4003	TASK TITLE:	PLANNING SUPPORT	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
MACKETT	DAVID	J	14 0	1	

TOTAL LABOR (\$K) (1100):	85.8
TOTAL PREMIUM PAY (1150):	1.0
TOTAL EC (1210):	18.0
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	105.0

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

OP: 050		Lab/Div: La Jolla OMI		CYOP Title: OMI - Administration - LJ	
Prepared: 11/25/97		Current Year Task #: 9WGN4003		Task Title: Planning Support	
Leader: Mackett		Prior Year Task #:			

21	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:	5.0K		Training:	
				Contracts:	
	Foreign:				
TOTAL TRAVEL =		5.0K			

22	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
			26	SUPPLIES (List major expenses)	COSTS
				Computer Upgrades	1.0K
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 1.0K		

23	RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =					

33C	COMPUTER	COSTS	TOTAL EQUIPMENT =		
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =		

24	PRINTING	COSTS			
TOTAL PRINTING =					

TOTAL OTHER OBJECTS	\$ 6.0K
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S051	CYOP TITLE:	OMI - OPERATIONS & MANAGEMENT - LA JOLLA		
TASK#:	8L1AEC50	TASK TITLE:	SAFETY AND ENVIRONMENTAL COMPLIANCE	DATE:	10-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
STEFANI	JEFFREY	R	12 7	1	

TOTAL LABOR (\$K) (1100):	56.4
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	11.8
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.0
TOTAL TASK (\$K):	68.2



SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

P: S051		Lab/Div: Administration		CYOP Title: Safety & Environmental Compliance	
Prepared: December 8, 1997		Current Year Task #: 8L1AEC50		Task Title: SWFSC Environmental Compliance	
Leader: Stefani		Prior Year Task #: 9WGN4007			

11	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic: Tiburon & Pacific Grove	1500		Training:	
	Honolulu	1500		Environmental, Health & Safety	1000
				Contracts:	
	Foreign:			Permits- HazMat, Wastewater, Air	1000
				Certification- HazMat, Emergency	500
				Analysis- Chemicals, Water, Air	500
				Disposal- Hazardous Waste	4800
TOTAL TRAVEL =		3000			

12	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		7800
			26	SUPPLIES (List major expenses)	COSTS
				Laboratory Safety	2000
				Hazard Communication	1000
				Health Protection	500
TOTAL TRANSPORTATION =		0	TOTAL SUPPLIES =		3500

13	RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
				Hazardous Material Storage	2000
				Emergency Response	1000
				Environmental Monitoring	500
TOTAL R-C-U =		0			

18C	COMPUTER	COSTS	TOTAL EQUIPMENT =		3500
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
TOTAL COMPUTER =		0			

14	PRINTING	COSTS	TOTAL G & C-O =		0
TOTAL PRINTING =		0			

TOTAL OTHER OBJECTS	\$17,800
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S051

Lab/Div: Administration

Page: 1

CYOP Title: Safety & Environmental Compliance

Leader: Stefani

Task Number: 8L1AEC50

Task Budget Total: \$ 86.0K

CYOP Budget Totals:

Personnel: \$ 68.2 K Other Objects: \$ 17.8 K Total: \$ 86.0 K

1. Major Fisheries Associated with CYOP

N/A

2. Fishery Management or Recovery Plans Associated with CYOP

N/A

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

To attain & sustain compliance with environmental, health & safety laws for the SWFSC labs.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To assure that facilities are in compliance with pertinent laws and regulations.
2. To assure that employees are protected from hazards.
3. To provide specialized support for environmental compliance issues.
4. To provide specialized support for safety and occupational health issues.
5. To provide training to staff in the areas of environmental, health and safety.



3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

By implementing the major activities that need to be accomplished in support of the performance elements of the Performance Plan.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Mandated by NOAA and NMFS Headquarters and authorized by SWFSC Director.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

By evaluating the performance standards criteria in the Performance Plan.

6. Products/Services

Customer Service

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

SWFSC Employees

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWFSC Administration



Page: 1

CYOP Number: SWC - S051

Leader: Stefani

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

[illegible]



**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S051	CYOP TITLE:	OMI - OPERATIONS & MANAGEMENT - LA JOLLA		
TASK#:	8L1C1AM2	TASK TITLE:	LA JOLLA LIBRARY	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
LOSEY	DEBRA	A	11 5	1	

TOTAL LABOR (\$K) (1100):	45.1
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	9.5
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	54.8

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

P: S051		Lab/Div: OMI		CYOP Title: OMI ADMINISTRATION - LA JOLLA	
Prepared: 11-26-97		Current Year Task #: 8L1C1AM2		Task Title: LA JOLLA LIBRARY	
Leader: LOSEY		Prior Year Task #: 8L1C1AM2			

1	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:			Training:	
	IAMS LIC ANNUAL CONFERENCE	1.5		Contracts:	
				DIALOG SEARCH SERVICES - FED	.8
				OCLC ONLINE SERVICES - FED	1.5
	Foreign:				
				NCAA CONTRACT FOR LIB. TECH.	39.5
				MICROFICHE READER PRINTER	.3
				UCSD PHOTOCOPY SERVICES	.4
TOTAL TRAVEL =		1.5	TOTAL CONTRACTS =		42.5
2	TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
	SHIPPING AND HANDLING	.1		JOURNAL SUBSCRIPTIONS - VENDOR	50.8
				JOURNAL SUBSCRIPTIONS - IRREGULAR	2.0
				BOOKS	5.0
				CD ROM SUBSCRIPTIONS	6.0
				INTERLIBRARY LOAN & MISCELLANEOUS	1.5
TOTAL TRANSPORTATION =		.1	TOTAL SUPPLIES =		65.3
3	RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
	COPIER	.3			
TOTAL R-C-U =		.3	TOTAL EQUIPMENT =		
3C	COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
	Gov. Owned/Leased:				
	INTERNET ACCESS	.1			
	Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =		
4	PRINTING	COSTS			
	BINDING	3.0			
TOTAL PRINTING =		3.0			

TOTAL OTHER OBJECTS	\$112.8
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**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S051	CYOP TITLE:	OMI - OPERATIONS & MANAGEMENT - LA JOLLA	
TASK#:	8L1C1AM3	TASK TITLE:	EDITORIAL SERVICES	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
RODRIGUEZ	MARYANN	A	9 5	1	

TOTAL LABOR (\$K) (1100):	39.0
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	8.2
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	47.4



SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

S051		Lab/Div: La Jolla Editorial Services		CYOP Title: OMI Administration-La Jolla	
Prepared: 11/13/97		Current Year Task #: 8L1C1AM3		Task Title: Editorial Services	
Leader: M.A. Rodriguez		Prior Year Task #: 8L1C1AM3			

	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic: OLO coordinators meeting	1.5		Training:	
				Contracts: Editing and word processing of manuscripts	5.4
	Foreign:				
	TOTAL TRAVEL =	1.5			
				TOTAL CONTRACTS =	5.4
	TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
	Fedex	0.2		office/computer supplies	1.1
	TOTAL TRANSPORTATION =	0.2		TOTAL SUPPLIES =	1.1
	RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
				office furniture; computer equipment	0.8
	TOTAL R-C-U =			TOTAL EQUIPMENT =	0.8
	COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
	Gov. Owned/Leased:				
	Contracted:				
	TOTAL COMPUTER =			TOTAL G & C-O =	
	PRINTING	COSTS			
	4-6 issues of SWC Quarterly Report of Activities; report covers	3.5			
	TOTAL PRINTING =	3.5			

TOTAL OTHER OBJECTS	\$12.5
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 051

Lab/Div: OMI Admin.-La Jolla

Page: 1

CYOP Title: Editorial Services

Leader: M.A. Rodriguez

Task Numbers 1st 8L1C1AM3 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ _____ K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 47.2 K Other Objects: \$ 12.7 K Total: \$ 59.9 K

1. Major Fisheries Associated with CYOP

1. N/A
- 2.
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. N/A
- 2.
- 3.
- 4.
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

To educate and gain more positive public support, NMFS needs to communicate its research findings in clearly-presented, non-technical terms to reach the largest possible audience about U.S. fishery resource and protected species problems, NMFS proposed solutions to these problems, and the scientific rationale for arriving at these solutions. This CYOP addresses the need for maintaining effective external communications with constituents and the public concerning the agency's mission, program activities, research results and accomplishments. It also addresses management's need for maintaining effective internal communications and tracking progress of research milestones within the Center.



2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To provide constituents with accurate, timely, and clearly presented information on research results and activities carried out by NMFS' Southwest Fisheries Science Center, and foster good relations with the public and media;
2. To provide staff support to the Center Director in tracking and reporting on progress of CYOP milestones and in maintaining effective in-house communication among Center laboratories; and
3. To ensure that SWC publications meet established editorial standards.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Public informational materials, including reports, brochures and media releases, are issued on a regular basis and regular contact is maintained with members of the local news media; a homepage is updated regularly for World Wide Web users; educational events are coordinated; Center program milestones are tracked and Director's SES Performance Plan prepared; Center documents are edited and prepared for publication including scientific manuscripts and special briefing documents and reports; Center Staff Meeting Minutes, SWFSC Quarterly Report of Activities and Director's Report to the Tuna Conference are assembled, edited, and prepared for publication.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Maintaining good public and constituent relations and providing effective information products has long been stressed within the agency, but most recently, as a result of the Management and Organization Review, "Agency Image and External Communications" was selected as one of nine charter areas in need for agency change/improvement, mandated by the National Performance Review with the expressed support of NOAA and the Department of Commerce, and the NMFS-appointed Public Affairs Tiger Shark Team was assigned to implement certain charter team recommendations.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The services performed create quality written materials and timely printed and electronic products that enhance the image of the SWFSC and NMF, improve internal and external communications, and reflect on the professionalism of the Center and the agency.

6. Products/Services

SWFSC Quarterly Report of Activities, Director's Report to the Annual Tuna Conference, SWFSC homepage, SWFSC descriptive brochures, special briefing documents, news releases on Center activities.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Representatives from the media receive press releases and are contacted about Center activities which may be of interest to their readers/viewers; various NMFS constituents, congressional staff and others within NOAA and NMFS regularly receive the Center's Quarterly Report of Activities and the Director's Annual Report to the Tuna Conference; the general public, school teachers, students, and civic groups benefit from public information activities, and NMFS Headquarters staff are provided selected briefing materials on request. Within the Center, editorial guidance and standards are provided to staff scientists, and all SWC personnel are clients in receiving information on Center research through the Quarterly Report of Activities and Center Staff Meeting Minutes.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

This CYOP coordinates public affairs, editorial and program tracking activities with all SWC laboratories (F/SWC1, F/SWC2, F/SWC3, F/SWC4) and divisions, and with the Southwest Regional Office in Long Beach, CA. It also cooperates regularly with NMFS/NOAA headquarters, especially EA5-NOAA Office of External Affairs assigned to NMFS.

FY 1997

CYOP Number: SWC-051 Lab/Div: OMI-Admin.-La Jolla Page: 1

Title: Editorial Services

Leader: M.A. Rodriguez

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C1AM3	M	1	Publish 4 SWC Quarterly Reports	10/97	9/98
8L1C1AM3	M	2	Complete Summary Report to Tuna Conference	3/97	5/97
8L1C1AM3	A	3	Track major SWC milestones	10/97	9/98
8L1C1AM3	M	4	Prepare Director's SES report	3/98	9/98
8L1C1AM3	A	5	Provide editorial support to SWC staff	10/97	9/98
8L1C1AM3	A	6	Prepare news items/press releases on major SWR activities or research results	10/97	9/98
8L1C1AM3	A	7	SWC Website maintenance	10/97	9/98
8L1C1AM3	M	8	Coordinate regional submissions for the publication Our Living Oceans 1997	11/97	9/98

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S051	CYOP TITLE:	OMI - OPERATIONS & MANAGEMENT - LA JOLLA			
TASK#:	8L1C1AM4	TASK TITLE:	ILLUSTRATIVE SERVICES			DATE: 09-Feb-98
LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
ALLEN	ROY	S	9	9	1	
ORR	HENRY	M	9	9	1	
RAYMOND	KENNETH	S	12	10	.25	
TOTAL LABOR (\$K) (1100):						113.3
TOTAL PREMIUM PAY (1150):						5.0
TOTAL EC (1210):						21.1
TOTAL COLA (1213)						0.0
TOTAL AWARDS (1159)						0.0
TOTAL TRAINING (25XX)						0.4
TOTAL TASK (\$K):						139.8

Project #: 051		Lab/Div: La Jolla / Scientific Services		CYOP Title: OMI - Operations & Management Support	
Prepared: 12-2-97		Current Year Task #: 8L1C1AM4		Task Title: Illustrative Services	
Leader: Ken Raymond		Prior Year Task #: 8L1C1AM4			
	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:			Training:	
				Contracts Non-federal contract	1.0K
	Foreign:				
TOTAL TRAVEL =					
	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 1.0K		
			26	SUPPLIES (List major expenses)	COSTS
				Photographic paper, films, chemicals, etc.	1.5K
				Toner cartridges, printer papers & supplies	2.0K
				Software, computer & printer maintenance	2.0K
				PR photo processing and public requests	0.5K
				Display and drafting materials	1.0K
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 7.0K		
	RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
				Memory upgrades	1.0K
				New support software	1.0K
TOTAL R-C-U =					
	COMPUTER	COSTS	TOTAL EQUIPMENT = 2.0K		
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
TOTAL COMPUTER =					
	PRINTING	COSTS	TOTAL G & C-O =		
	1994 Collected Reprints	10.0K			
TOTAL PRINTING =		10.0K			
			TOTAL OTHER OBJECTS \$20.0K		

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 051 **Lab/Div:** LJ /AD

Page: 1

CYOP Title: Illustrative Services

Leader: Ken Raymond

Task Numbers 1st 8L1C1AM4 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 159.8 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 139.4 K Other Objects: \$ 20.4 K Total: \$ 159.8 K

1. Major Fisheries Associated with CYOP

1. NA.
- 2.
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. NA.
- 2.
- 3.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Supports publication and graphic needs of Center-wide and Regional programs / research.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To support Center / Region publication requirements
2. To support Center / Region graphic and visual needs
3. To support Center / Region photographic and Audio-Visual demands

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

To maximize value through efficient utilization of computer graphics. Specifically -- a) Use computer to produce maps or graphics digitally on film or paper, B&W or color, for publication or visual presentation. b) Use electronic publishing programs to produce Center Newsletters, Technical memorandums, Administrative Reports, and other documents (such as - Directors' Report to the Tuna Conference, etc..) c) To maintain high quality with existing staff.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

- a) All plans / mandates / authorities directly / indirectly benefit by the support and service given by this CYOP.
- b) Priorities based on need and relative significance. Any scheduling conflicts are resolved.
- c) Centralized Illustrative Services support reduces costs to the Center and Region.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Refer to 3) and 4) above

6. Products/Services

Computer slides, overhead transparencies, video and audio support, photographic support, display and exhibit creation and representation, poster session creation, answer public requests for file films, publication / brochure design and layout, printing negotiation and instructions to GPO or private contractors.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

All Divisions / Groups / Laboratories of the SWFSC and many elements of the SWR. The public and commercial businesses use our publications and photographs.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWFSC and SWR elements all share usage. Budget funded by SWFSC Administration.

Leader: Ken Raymond

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

[illegible]

051	Lab/Div: OMI - Administration	CYOP Title: Unemployment
Prepared: 12/2/97	Current Year Task #: 8L1C1AUN	Task Title: Unemployment
Reader: Hostler	Prior Year Task #: 8L1C1AUN	

TOTAL FTE FTP POSITIONS (1100) =		
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TOTAL FTE PTP POSITIONS (1132) =		
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MENTS:

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S051	CYOP TITLE:	OMI - OPERATIONS & MANAGEMENT - LA JOLLA		
TASK#:	9WGN4005	TASK TITLE:	OPERATIONS AND MANAGEMENT SUPPORT	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
ENGSTRAND	BARBARA	R	12	4	1	
HOLDER	PATRICIA	G	6	6	1	
HOSTLER	VIRGINIA	R	12	3	1	
PEREZ	ESTHER	M	7	3	1	
RASMUSSEN	SHERRIE	L	13	0	1	QSI
WATKINS	BARBARA	A	7	10	1	
WHYTE	RONALD	H	4	10	1	

TOTAL LABOR (\$K) (1100):	289.8
TOTAL PREMIUM PAY (1150):	1.0
TOTAL EC (1210):	60.9
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	1.4
TOTAL TASK (\$K):	353.1

0351	Lab/Div: La Jolla OMI		CYOP Title: OMI Administration - LJ																																											
Prepared: 11/25/97		Current Year Task #: 9WGN4005	Task Title: Operations and Management Support																																											
Leader: Rasmussen		Prior Year Task #:																																												
<table border="1"> <tr> <th>TRAVEL</th> <th>COSTS</th> </tr> <tr> <td>Domestic:</td> <td>8.5</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>GSA Vehicle: Station Wagon</td> <td>5.0</td> </tr> <tr> <td>Foreign:</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td colspan="2">TOTAL TRAVEL = 13.5</td> </tr> </table>		TRAVEL	COSTS	Domestic:	8.5					GSA Vehicle: Station Wagon	5.0	Foreign:								TOTAL TRAVEL = 13.5		25	<table border="1"> <tr> <th>CONTRACTS</th> <th>COSTS</th> </tr> <tr> <td>Training:</td> <td></td> </tr> <tr> <td>Contracts:</td> <td></td> </tr> <tr> <td>Office equipment maintenance and repair</td> <td>2.6</td> </tr> <tr> <td>Safe combination changes and repair</td> <td>.2</td> </tr> <tr> <td>UCSD computer and miscellaneous services</td> <td>1.0</td> </tr> <tr> <td>Temporary services</td> <td>2.5</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td colspan="2">TOTAL CONTRACTS = 6.3</td> </tr> </table>		CONTRACTS	COSTS	Training:		Contracts:		Office equipment maintenance and repair	2.6	Safe combination changes and repair	.2	UCSD computer and miscellaneous services	1.0	Temporary services	2.5							TOTAL CONTRACTS = 6.3	
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**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S051	CYOP TITLE:	OMI - OPERATIONS & MANAGEMENT - LA JOLLA			
TASK#:	9WGN4006	TASK TITLE:	BLDG & GROUNDS - LA JOLLA			DATE: 26-Jan-98
LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
KROM	STANLEY	R	8	5	1	
MARROW	MERLE	A	11	7	1	QSI
TOTAL LABOR (\$K) (1100):						81.7
TOTAL PREMIUM PAY (1150):						0.0
TOTAL EC (1210):						17.2
TOTAL COLA (1213)						0.0
TOTAL AWARDS (1159)						0.0
TOTAL TRAINING (25XX)						0.4
TOTAL TASK (\$K):						99.3

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

0051	Lab/Div: La Jolla OMI	CYOP Title: OMI Administration - La Jolla
Prepared: 12/11/97	Current Year Task #: 9WGN4006	Task Title: Building & Grounds
Leader: Marrow	Prior Year Task #: 9WGN4006	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
			Grounds maintenance	35.6K
			Freezer, chiller system, air conditioning	3.0K
Foreign:			Boiler repair & maintenance	2.0K
			Day labor	2.5K
			Trash	3.2K
			Janitorial service	110.0K
			Forklift repairs & maintenance	3.0K
			Elevator PM and service	3.5K
			Emergency repairs	5.0K
			Cellular phone	0.4K
			Oxygen inhaler, medical	1.3K
TOTAL TRAVEL =				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 169.5K	
		26	SUPPLIES (List major expenses)
			Building Supplies
TOTAL TRANSPORTATION =		TOTAL SUPPLIES = 32.0K	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
SDG&E gas	25.0K		Tools	1.5K
SDG&E electric	85.0K			
Water and sewer	16.0K			
TOTAL R-C-U = 126.0K				

COMPUTER	COSTS	TOTAL EQUIPMENT = 1.5K	
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS
Contracted:			
TOTAL COMPUTER =		TOTAL G & C-O =	

PRINTING	COSTS		
TOTAL PRINTING =			

TOTAL OTHER OBJECTS
\$ 329.0K

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

0351	Lab/Div: OMI-Administration	CYOP Title: EEO/Human Resources
Prepared: 12/2/97	Current Year Task #: 9WGN4008	Task Title: Work Study Program
Leader: Hostler	Prior Year Task #: 9WGN4008	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
			Work Study Program	\$6.0K
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS	\$6.0K		
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$6.0K
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 051

Lab/Div: OMI-Administration

Page: 1

CYOP Title: EEO/Human Resources

Leader: Hostler

Task Numbers 1st 9WGN4008 2nd 8L1C1AUN 3rd _____ 4th _____

Task Budget Totals \$ 6.0 _____ K \$ 25.0 _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 25.0 _____ K Other Objects: \$ 6.0 _____ K Total: \$ 31.0 _____ K

1. Major Fisheries Associated with CYOP

- 1. N/A
- 2.
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

- 1. N/A
- 2.
- 3.
- 4.
- 5.
- 6.

NARRATIVE SECTION

- 1. Problem Statement** (What management or scientific problem or issue does this CYOP help solve?)
The work study program provides technical support for La Jolla scientists.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To provide technical support for La Jolla scientists
2. To
3. To
4. To

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

The SW Center has established a contract with the UCSD to provide employment for work study students.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Satisfactory job performance of students.

6. Products/Services

Provide technical support to La Jolla scientists.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients - SWC scientists

Suppliers

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S052	CYOP TITLE:	OMI - IT SUPPORT - LA JOLLA	
TASK#:	8L1C1A02	TASK TITLE:	INFORMATION TECHNOLOGY SUPPORT	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
COSGROVE	RICHARD	E	11	1	1	
RALSTON JR	FRANK	M	12	6	1	
BONES	MATTHEW	D	11	6	1	
BISTODEAU	ROBERT	S	13	2	1	
VU	THANH HUYEN	T	11	3	1	

TOTAL LABOR (\$K) (1100):	242.6
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	50.9
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	1.5
TOTAL TRAINING (25XX)	1.0
TOTAL TASK (\$K):	296.0

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

0052	Lab/Div: Information Technology Services	CYOP Title: Information Technology Services - La Jolla
Prepared: 11/6/97	Current Year Task #: 8L1C1A02	Task Title: Information Technology Services - La Jolla
Leader: Bistodeau	Prior Year Task #: 8L1C1A02	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training: Specialized Technical Operations	10.0
RITC Conferences/Meetings	2.0		Contracts:	
Workshops/Training	3.0		Cisco Router Maintenance	1.0
Remote Laboratory Work	2.0		Printer Maintenance	1.0
Foreign:			COM-AID Telecommunications Maintenance	8.0
TOTAL TRAVEL =				
	7.0			

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		20.0
Fedex	1.0	26	SUPPLIES (List major expenses)	COSTS
			Network Cable, Panels, Connectors	11.0
			Upgrades, Repairs, Parts, Tools	6.0
			Phone System	3.0
			Specialized Software Purchases	9.0
			Computer Based Training	2.0
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	
	1.0			31.0

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
			Superstack 3000 (2)	11.0
			Superstack 1000 (8)	19.0
			Pentium File Servers	12.0
			Pentium Workstation	3.0
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		45.0
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
UCSD IP Services	10.0			
TOTAL COMPUTER =				
	10.0			

PRINTING	COSTS	TOTAL G & C-O =		
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$114.0
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SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

: 052	Lab/Div: Information Technology Services	CYOP Title: Information Technology Services - La Jolla
Prepared: 11/6/97	Current Year Task #: 8L1C1CLJ	Task Title: Fisheries Information Technology - La Jolla
Leader: Bistodeau	Prior Year Task #: 8L1C1C03	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:				
TOTAL TRAVEL =				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		50.0
		26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =				

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
TOTAL COMPUTER =				

PRINTING	COSTS	TOTAL G & C-O =		50.0
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$50.0
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 052

Lab/Div: Information Technology Services

Page: 1

CYOP Title: Information Technology Services - La Jolla

Leader: Bistodeau

Task Numbers 1st 8L1C1A02 2nd 8L1C1CLJ 3rd _____ 4th _____

Task Budget Totals \$ 410.0 K \$ 50.0 K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 295.0 K Other Objects: \$ 165.0 K Total: \$ 460.0 K

1. Major Fisheries Associated with CYOP

1. General IT support for all.
- 2.
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. General IT support for all.
- 2.
- 3.
- 4.
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This CYOP provides information technology coordination, support, development, and operations for NMFS customers.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To provide information technology related, support, development, and operations
2. To coordinate NMFS information technology related activities region-wide
3. To coordinate NMFS information technology related activities nation-wide
4. To provide and introduce innovative uses of new information technology to the staff

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

A total team approach along with continuous self and formal training is used to provide a wide range of information technology services in a timely manner.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

It is important to provide and support the reliable and efficient use of computers for day to day operations needed to meet the organization's mission.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Reliability of computing resources, the response time for addressing and solving problems, on-time delivery of systems as specified by our customers

6. Products/Services

Computer related strategic planning, Local Area Network, Wide Area Network, and Internet operations, telecommunications management, administrative information systems, hardware installation and repair, UNIX system administration and support, Database administration and support, regional and national information technology coordination, on-call customer support and consulting services, video conferencing support, and World Wide Web development and administration.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients consist of all division, laboratory, building tenants, and other NMFS regional and HQ staff. Suppliers consist of industry wide hardware and software vendors.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

All divisions, laboratories, regions, and affiliated organization in NOAA. Tied to IT-95 budget for contracting of computer services and IT-95 operations and maintenance.

CYOP Number: SW/C - 052

Lab/Div: Information Technology Services

Page: 1

Title: Information Technology Services - La Jolla

Leader: Bistodeau

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C1A02	A	1	Provide IT related planning and coordination	10/97	9/98
8L1C1A02	A	2	Provide general computer support/consulting	10/97	9/98
8L1C1A02	A	3	Manage Local Area Network operations	10/97	9/98
8L1C1A02	A	4	Manage Wide Area Network operations	10/97	9/98
8L1C1A02	A	5	Manage telecommunication systems	10/97	9/98
8L1C1A02	A	6	Maintain and develop administrative systems	10/97	9/98
8L1C1A02	A	7	Provide equipment/hardware installation/repair	10/97	9/98
8L1C1A02	A	8	Manage NMFS IT computer systems, contract, budget	10/97	9/98
8L1C1A02	A	10	Provide Cogniscope computer support	10/97	9/98
8L1C1A02	A	11	Participate in NMFS System Architecture project	10/97	9/98
8L1C1A02	A	12	Provide WWW/Intranet management and implementation	10/97	9/98
8L1C1A02	A	13	Provide scientific and GIS application program support	10/97	9/98
8L1C1A02	M	14	Complete Phase I of the Local Area Network infrastructure upgrade	11/97	6/98
8L1C1A02	M	15	Evaluate alternative database platforms to complement Oracle	1/98	9/98

Senior Scientist

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S060	CYOP TITLE:	SENIOR SCIENTIST UNIT - LA JOLLA	
TASK#:	8L1APRP1	TASK TITLE:	SENIOR SCIENTIST	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
PERRIN	WILLIAM	F	15 0	1	

TOTAL LABOR (\$K) (1100):	101.0
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	21.2
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	122.4

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

: S060		Lab/Div: SWFSC/Sr. Scientist		CYOP Title: Senior Scientist Unit	
Prepared: 11/25/97		Current Year Task #: 8L1APRP1		Task Title:	
Leader: Perrin		Prior Year Task #: 8L1APRP1			

	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic: Museum visits (2)	1.0		Training:	
				Contracts: Sergio Escorza	12.0
	Foreign:				
	MM Conference (Monaco)	3.9			
	Malaysia/Philippines	1.1			
	TOTAL TRAVEL =	6.0			

	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 12.0		
			26	SUPPLIES (List major expenses)	COSTS
				Lab. & field supplies	4.1
				(film reagents, photo processing, paper, files, reprints)	
	TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	4.1

	RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
				Scanner	.5
				Software	1.0
				Computer upgrade	2.5
	TOTAL R-C-U =				

	COMPUTER	COSTS	TOTAL EQUIPMENT = 4.0		
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
	TOTAL COMPUTER =				

	PRINTING	COSTS	TOTAL G & C-O =		
	TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$26.1
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S060

Lab/Div: Senior Scientist Unit

Page: 1

CYOP Title: Senior Scientist Unit

Leader: Perrin

Task Numbers 1st 8L1APRP1 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 148.5 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 122.2 K Other Objects: \$ 26.3 K Total: \$ 148.5 K

1. Major Fisheries Associated with CYOP

1. ETP tuna fishery
2. Japanese whale fisheries
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This CYOP addresses questions of national and international conservation and management of whales, dolphins and porpoises.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To contribute to knowledge of stock identity of cetaceans

2. To examine movements and stock identity of whale sharks in Southeast Asia
3. To edit the international journal "Marine Mammal Science"
4. To provide advice to national and international agencies and bodies managing marine mammals

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Morphological and genetic studies, editing journal, participating in international advisory bodies (scientific council of CMS, Scientific Committee of IWC, Cetacean Specialist Group, and SCC of IUCN).

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

U.S. has national and international obligations to contribute to conservation and management of marine mammals (MMPA, IWC).

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Production of journal "Marine Mammal Science," provision of advice, publication of technical papers.

6. Products/Services

Marine Mammal Science

Technical publications

Advice and meeting working papers.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: IWC, NMFS, CMS, IUCN, international research community

Suppliers

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWFSC Marine Mammal Division, CMS Scientific Council, IWC Scientific Committee, Universities in Southeast Asia (Malaysia & Philippines).

CYOP Number: SWC - S060

Lab/Div: SWFSC/Senior Scientist

Title: Senior Scientist Unit

Leader: Perrin

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

[illegible]

Coastal Fisheries Resources Division

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S301	CYOP TITLE:	POPULATION BIOLOGY OF FISHES	
TASK#:	8L1A3A30	TASK TITLE:	POP BIO OF FISHES - GENERAL	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
KIMBRELL	CAROL	A	9	9	1	
HUNTER	JOHN	R	15	0	1	
FOSTER	DIANE	E	7	7	1	
MACEWICZ	BEVERLY	J	9	8	1	

TOTAL LABOR (\$K) (1100):	215.0
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	45.1
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.8
TOTAL TASK (\$K):	260.9

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

301	Lab/Div: SWFSC/CFRD	CYOP Title: Population Biology of Fishes
Prepared: 12/1/97	Current Year Task #: 8L1A3A30	Task Title: Fisheries Ecology - General
Reader: John R. Hunter	Prior Year Task #:	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	10.0
Foreign:				
TOTAL TRAVEL =				
	5.8		TOTAL CONTRACTS = 10.0	

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
				7.9
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 7.9	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
Seawater	12.0			7.0
TOTAL R-C-U =			TOTAL EQUIPMENT = 7.0	
	12.0			

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:			CalCOFI fee	12.0
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O = 12.0	

PRINTING	COSTS	TOTAL OTHER OBJECTS \$54.7		
TOTAL PRINTING =				

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S301	CYOP TITLE:	POPULATION BIOLOGY OF FISHES		
TASK#:	8L1A3A31	TASK TITLE:	POPULATION OF BIO OF FISHES	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
LYNN	ERIC	A	9 9	1	
ROBERTSON	LAWRENCE	L	7 6	1	
VETTER	RUSSELL	D	13 0	1	GS14-3, 11/23/97

TOTAL LABOR (\$K) (1100):	141.6
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	29.7
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.6
TOTAL TASK (\$K):	171.9

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

: 301	Lab/Div: SWFSC/CFRD	CYOP Title: Population Biology of Fishes
Prepared: 12/1/97	Current Year Task #: 8L1A3A31	Task Title: Physiology & Genetics
Reader: Russell D. Vetter	Prior Year Task #:	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	3.0		Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				
	3.0			

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
				20.0
TOTAL TRANSPORTATION =				

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
				5.4
TOTAL R-C-U =				

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:			Radiation license	0.7
Contracted:				
TOTAL COMPUTER =				

PRINTING	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$29.1
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 301

Lab/Div: SWFSC

Page: 1

CYOP Title: Population Biology of Fishes

Leader: John Hunter

Task Numbers 1st 8L1A3A30 2nd 8L1A3A31 3rd _____ 4th _____

Task Budget Totals \$ 315.6 K \$ 201.0 K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 431.4 K **Other Objects:** \$ 85.2 K **Total:** \$ 516.6 K

1. Major Fisheries Associated with CYOP

1. Coastal Pelagic Fishes: Pacific sardine, northern anchovy, market squid
2. Groundfishes: Pacific hake, rockfish species, thornyhead species
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. Coastal Pelagics Fisheries Management Plan (pending)
2. Groundfish Fisheries Management Plan
3. Description and Protection of Essential Fish Habitat
- 4.
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

The central mission of this task is to provide information needed to estimate abundance, and assess the vulnerability of stocks of the California Current system to fishing and environmental change. In an upwelling system such as the California Current, environmentally induced changes such as El Niño events are recognized as a key element in assessing the sensitivity of stocks to fishing. A key goal of the task is to provide advice on which factors affecting a fishery are amenable to management, and which are determined by natural forces.

The task also focuses on recreational fishing which generates about \$1 billion per year and is increasingly becoming a contentious issue in west coast management. Information provided by this task is combined with that provided by other Division tasks to provide stock assessments of groundfish and coastal pelagic fish stocks.

The task is dedicated to improving quality and reducing the time and costs of acquiring basic biological information needed for high quality stock assessments. Scientifically innovative, the task proposes to evaluate and apply new or advanced technology. Examples are: the use of airborne lidar for biomass estimation, advanced molecular methods for species and stock identification, molecular methods for detection of environmental stress, (e.g. ultraviolet radiation), and direct *in situ* measurement of spawning rates for age specific maturity and fecundity.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To develop methods for predicting year class strength primarily through novel measures of early life history parameters and ocean physics.
2. To provide reproductive data needed for ichthyoplankton-based estimates of stock abundance carried out by CFRD.
3. To evaluate airborne lasers (lidar) as a method for estimating the abundance of epipelagic fish stocks.
4. Develop alternate molecular methods of assessing: stock structure, growth rate, condition, and age when conventional methods are not applicable.
5. Develop and evaluate population genetic models as tools for stock identification, and assessment of effects of fishing on genetic stock structure.
6. Assess habitat and the value of marine ecological reserves as sources of eggs to "reseed" fished areas.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

The task has a long tradition of innovation. Currently, we have a strong emphasis in four areas. First, the task has pioneered histological methods for measuring *in situ* spawning rates, fecundity, and maturity. These are pivotal measurements for ichthyoplankton-based estimates of stock abundance. In 1994 we completed a coast-wide estimate of sardine in cooperation with Mexico and presently methods are being developed for hake.

The second is developing molecular biological techniques as a way to answer long standing questions regarding the fishery resources of the California Current. The California Current can influence recruitment success by the physical transport of larvae, and by its influence on productivity. We are attempting to use genetic markers to determine the influence of current patterns on stock structure. We are developing molecular methods to determine the growth patterns of larvae and the impact of climate changes, including ultraviolet radiation, on the survival of fish larvae. We are also developing methods by which the unique genetic identity of a species can be used to identify fish larvae that can not be identified by other means.

A third area of innovation is the application of laser-based (lidar) technologies to estimate the biomass of epipelagic fishes from the air. The task provides the fisheries expertise in a partnership with OAR engineers.

A fourth area is the scientific evaluation of the value of marine ecological reserves as a tool in fishery management. This involves intensive sampling of habitat-specific egg production combined with mapping and near-shore oceanography to evaluate optimal size and location of marine reserves to maximize their reproductive contribution to the fished population.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

The authority for task activities include the NMFS Strategic Plan Objectives: 1) Build Sustainable Fisheries (biological measurements required for stock assessments of west coast groundfish such as hake, slope complex, and coastal pelagic fishes (sardine, anchovy, mackerel) and longer range studies of recruitment variability and unit stock questions; 2) Healthy Coastal Ecosystems Objectives (with projects including identification of essential fish habitats and reproductive output from inshore habitats). More specifically, biological measurements needed for management of hake and the slope complex, and the anchovy are required under federal fisheries management plans. Sardine and mackerel are managed by the state of California using information provided by Coastal Division tasks and a federal management plan for these species (including squid which is pending).

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The primary goal of the division is to contribute scientific knowledge to allow accurate predictions of stock size and allowable harvest for inherently unstable coastal pelagic species such as market squid and Pacific sardine that undergo extreme yearly fluctuations in recruitment success due to environmental factors. The ultimate measure of success is the proper adjustment of yearly harvest quotas that permit optimal harvest during good years while protecting the stock during poor recruitment years.

Another criteria would be the success of advance predictions regarding the relative abundances of alternative target species within a common gear fishery, (e.g. predictions of the relative abundances of market squid vs Pacific sardine based on recruitment success).

6. Products/Services

Estimates of economic value of fisheries. Abundance estimates for coastal pelagic species and groundfish. Improved stock assessment techniques. Recommendations for improved management and restoration of depleted stocks. Information regarding the genetic basis for stock identification, and the preservation of genetic diversity. Information on "essential fish habitat". These products are developed as peer reviewed scientific papers whenever possible.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

The CalCOFI program was established as a joint effort of the California Department of Fish and Game, the University of California and NMFS. As such, all of the agencies depend on each other for funding and share information.

Information and reports generated by this program are used by (1) the Pacific Fishery Management Council, (2) the Pacific States Marine Fishery Commission, (3) State/federal cooperative management efforts, (4) U. S. government agents in fisheries currently or prospectively under international management, (5) U. S. representatives in international fisheries investigations (e.g. MEXUS-Pacifico), (6) government agents that manage marine mammals and seabirds (coastal pelagic species are the primary forage base). (7) other public groups concerned with near shore ocean management. We are the only molecular biology laboratory in the SW region and as such we provide expertise in this area for the entire region.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

The task is integrated and coordinated from the Division level to the international level. At the Division level, the task is integrated with other tasks in the Division as it is a major supplier of biological information for stock assessments of Task 330 and parameter estimates for Division-wide estimations of fish biomass carried out by Task 320. The task works also with Tiburon Laboratory in developing molecular genetic methods for identifying larvae in their fishery surveys. At the Regional level, the Division, as a supplier of economic products, works closely with SWR habitat managers. At the NOAA level, the task works cooperatively with OAR in developing new aerial survey techniques, and with NWFSC and AFSC in developing a cooperative program on hake. The CalCOFI program is a central integrating element for the Division as a whole, as well as this task resulting in close coordination with state agencies (University of California (Scripps Institution) and California Department of Fish and Game. The task also has important new linkages with CDF&G in the assessment and management of market squid and in the study of marine ecological reserves. Internationally, the task and the Division as a whole, has a leadership role in the study of small pelagic fishes. This has lead to research projects developed by the task and Division being duplicated in other countries under international coordinating bodies (PICES and GLOBEC International) providing a broad comparative information base for interpretation, or in the case of Mexico, the two countries working together on joint surveys of trans-boundary species (MEXUS Pacifico).

CYOP Number: SWC - 301

Lab/Div: Coastal Division

Page: 1

Title: Population Biology of Fishes

Leader: John Hunter

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task # 301	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
811A3A30	E	1	Conduct cruise to measure reproductive output and age of market squid	1/98	2/98
"	E	2	Complete draft manuscript on hake fecundity and reproduction	1/98	10/98
"	A	3	Conduct studies on the fecundity of market squid	2/98	2/99
"	A	4	Coordinate expanded CalCOFI surveys for the 97-98 El Niño, including coast wide egg pump survey on Miller Freeman	10/97	12/98
"	A	5	Coordinate joint science program on fishery resources with Mexico	10/95	6/99
"	A	6	Coordinate International science program on small pelagic fishery resources under GLOBEC and PICES	10/95	6/99
"	A	7	Coordinate joint research program with CDF&G on market squid	10/97	6/2000
"	E	8	Complete draft manuscript on modeling lidar surveys	1/97	10/98

8L1A3A31	A	9	Conduct cruise to examine Marine Ecological Reserves: determine habitat, fish communities, egg production, and oceanographic conditions as they relate to egg dispersal from and juvenile recruitment to marine reserves	11/97	11/97
"	A	10	Conduct cruise to examine Marine Ecological Reserves: determine habitat, fish communities, egg production, and oceanographic conditions as they relate to egg dispersal from and juvenile recruitment to marine reserves	2/98	3/98
"	A	11	Conduct cruise to examine Marine Ecological Reserves: determine habitat, fish communities, egg production, and oceanographic conditions as they relate to egg dispersal from and juvenile recruitment to marine reserves	4/98	4/98
"	M	12	Complete manuscript on effects of dispersed paper waste on filter-feeding efficiency of Pacific sardine. Marine Pollution Bulletin	6/97	11/97
"	M	13	Complete manuscript on molecular methods of larval identification of rockfishes	6/97	1/98
"	M	14	Complete manuscript on molecular phylogenetics of the Sebastomus subgenus of Sebastes	6/97	1/98
"	M	15	Complete manuscript on ultraviolet effects on arcto-Norwegian cod	6/97	8/98

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S304	CYOP TITLE:	FISHERIES ENVIRONMENT INVESTIGATIONS	
TASK#:	8L1A4B32	TASK TITLE:	FISHERIES ENVIRONMENT INVES	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
BLISS	KENNETH	A	11	10	1	
DOTSON	RONALD	C	11	8	1	
LYNN	RONALD	J	13	0	1	

TOTAL LABOR (\$K) (1100):	172.0
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	36.1
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.6
TOTAL TASK (\$K):	208.7

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

0304	Lab/Div: SWFSC/CFRD	CYOP Title: Coastal Eastern Pac. Fish. Environmental Investigations
Prepared: 12/1/97	Current Year Task #: 8L1A4B32	Task Title: Fisheries Ecology
Prepared by: Ronald J. Lynn	Prior Year Task #:	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	1.9		Training:	
			Contracts:	1.0
Foreign:				
TOTAL TRAVEL =				
	1.9			

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 1.0		
		26	SUPPLIES (List major expenses)	COSTS
				1.0
TOTAL TRANSPORTATION =				

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
				2.0
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT = 2.0		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	2COSTS
Contracted:				
TOTAL COMPUTER =				

PRINTING	COSTS	TOTAL G & C-O =		
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$5.9
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC -304

Lab/Div: Coastal Division

Page: 1

CYOP Title: Fisheries Environmental Investigations

Leader: Ronald J. Lynn

Task Numbers 1st 8L1A4B32 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 214.6 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 208.1 K Other Objects: \$ 6.5 K Total: \$ 214.6 K

1. Major Fisheries Associated with CYOP

1. Pacific groundfish (Hake)
2. Coastal pelagics (Sardine and Anchovy)

2. Fishery Management or Recovery Plans Associated with CYOP

1. Coastal Pelagics Species (pending)
2. Pacific Coast Groundfish

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Observations and an understanding of the spatial and temporal variations in the California Current ecosystem are needed to predict the dynamics of marine populations. Both interannual variations in the physical oceanographic conditions and long term changes in the marine environmental (climate shifts and El Niño-Anti El Niño) act upon the viability of fish populations. Monitoring the physical environment is needed to provide accurate population estimates and to address the differences between anthropogenic and natural induced variations in populations.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To carry out physical oceanographic projects in support of fishery research.
2. To develop capability to predict the impact of variations in climate upon fishery dynamics.

3. To maintain the Coastal Division capability to monitor the marine environment.
4. To function as NESDIS CoastWatch West Coast Node and support marine living resource research through creation and distribution of remote sensing products and research.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Design and execute oceanographic projects in cooperation with fishery scientists. Interpret and report results. Model the relational effects of climate variation upon fishery dynamics. Maintain functionality of oceanographic instrumentation systems and data processing capability. Produce daily and customized remote-sensing products through the NESDIS-funded west coast CoastWatch node. Route image products to research vessel in real-time and provide interpretation.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Fishery management requires reliable estimates of fish populations and a reasonable predictive capability as to the effectiveness of management tools. However environmentally-induced variations in annual recruitment can vary over orders of magnitude. Also history has shown that climate-induced variations in fish population trends can overwhelm any hypothetical assumptions of sustainable yield. Thus, effective management of fishing pressure is only credible when the larger ecosystem is monitored and understood.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Timely receipt of physical oceanographic data processed to high quality standards. Cooperation in projects that apply physical oceanography and remote sensing results to fishery research. Improved understanding of relational connections between marine climate variations and fishery responses. Receipt of near real-time remote sensing imagery.

6. Products/Services

Published papers and reports and oral presentations interpreting oceanography.
Processed data files; graphs; maps; remote-sensing image files.
Assistance in application of oceanographic results to fisheries studies.
Survey design.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: Research scientists and population modelers.
Suppliers: Sea-going personnel; cooperating personnel at SIO, NESDIS CoastWatch.

3. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

J. Hunter, R. Charter, P. Smith, R. Vetter, G. Moser; CalCOFI - SIO; SIO Remote Sensing Lab; NOAA/NESDIS CoastWatch.

CURRENT YEAR OPERATING PLAN - FORM 3
FY 1998

CYOP Number: SWC - 304

Lab/Div: Coastal Division

Page: 1

Title: Fisheries Environmental Investigations

Leader: Ronald J. Lynn

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task # 304	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A4B32	E	1	Plan and conduct physical oceanographic observations for ecological reserve surveys in cooperation with Division scientists	12/97	9/98
"	E	2	Monitor progress of 1997-98 El Niño and its impact upon fishery survey and research results	present	indeterminant
"	M	3	Publish report on state of the California Current in CalCOFI Reports	present	6/98
"	M	4	Produce manuscript on sardine spawning habitat	present	5/98
"	E	5	Produce report on oceanographic conditions of hake spawning	present	9/98
"	A	6	Maintain oceanographic equipment and computer systems for logging and analyzing oceanographic data	on-going	Cont.
"	A	7	Process CTD and ADCP data files. Produce files, maps, and graphs as required	on-going	Cont.
"	A	8	Manage and operate CoastWatch west coast node	on-going	Cont.

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S318	CYOP TITLE:	ECOLOGY AND SYSTEMATICS OF FISHES CALCOFI		
TASK#:	8L1A3A33	TASK TITLE:	ECOLOGY/SYSTEMATICS OF FISHES	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
CHARTER	SHARON	R	9	6	1	
MOSER	H	G	14	0	1	
AMBROSE	DAVID	A	11	7	1	QSI
ACUNA	ELAINE	M	9	10	1	
WATSON	WILLIAM	N	11	8	1	QSI

TOTAL LABOR (\$K) (1100):	263.1
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	55.3
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	1.0
TOTAL TASK (\$K):	319.4

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

318	Lab/Div: SWFSC/CFRD	CYOP Title: Ecology/Systematics of Fishes (CalCOFI)
Prepared: 12/1/97	Current Year Task #: 8L1A3A33	Task Title: Fisheries Ecology
Order: H. Geoffrey Moser	Prior Year Task #:	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	3.2		Training:	
			Contracts:	13.0
Foreign:				
TOTAL TRAVEL =				
	3.2			

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		13.0
		26	SUPPLIES (List major expenses)	COSTS
				7.0
TOTAL TRANSPORTATION =				

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =				

PRINTING	COSTS	TOTAL G & C-O =		
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$23.2
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 318

Lab/Div: Coastal Division

Page: 1

CYOP Title: Fisheries Ecology and Assessment: CalCOFI

Leader: H. Geoffrey Moser

Task Numbers 1st 8L1A3A33 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 342.6 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 318.4 K Other Objects: \$ 24.2 K Total: \$ 342.6 K

1. Major Fisheries Associated with CYOP

1. Pacific Coast Pelagic Fisheries: Pacific sardine, Northern anchovy, Pacific mackerel, market squid
2. Pacific Coast Groundfish Fisheries: Pacific hake, rockfishes, thornyheads, flatfishes

2. Fishery Management or Recovery Plans Associated with CYOP

1. Coastal Pelagics Fisheries Management Plan (pending)
2. Groundfish Fisheries Management Plan
3. Description and Protection of Essential Fish Habitat

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

The principal mission of this task is to provide data and information needed for the assessment and management of west coast commercial and recreational fish stocks. The task produces a major portion of the CalCOFI ichthyoplankton time series which is the basic tool for producing fishery-independent biomass estimates of fish stocks. The associated CalCOFI oceanographic time series is used in conjunction with the ichthyoplankton time series to determine how changes in the abundance and distribution of fish stocks are related to oceanographic flux and trophic interactions over short-term (seasonal/inter-annual) and long-term (decadal/climate) time scales. Since most of the fish species in the California Current system and associated coastal habitats are represented in the CalCOFI ichthyoplankton time series, the task has a unique opportunity to study fish community interactions and provide information for multispecies management.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To produce data, analyses, publications, and other documentation needed to assess biomass and annual recruitment of major coastal pelagic fish stocks (anchovies, sardines, mackerels).
2. To produce data, analyses, publications, and other documentation needed to assess biomass and annual recruitment of major groundfish stocks (e.g., Pacific hake, sablefish, Dover sole, rockfishes, important nearshore fish species).
3. To describe fish community structure and interactions in relation to environmental variables in the California Current region and develop analyses leading to the formulation of ecosystem models.
4. To develop ichthyoplankton-based methods for assessing and determining essential fish habitats in California coastal regions.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Ichthyoplankton and associated environmental data from historical and current plankton and trawl surveys are utilized to produce data. Processing involves identification, enumeration, measurement, staging, computer entry, and analysis of approximately 500 species. Using this data, new methods are developed to measure biomass of coastal pelagic and groundfish species, recruitment of these species, and to understand community ecology of California Current region. Examples are the egg production methods developed for coastal pelagics (e.g., northern anchovy, Pacific sardine) and groundfish species (e.g., Dover sole and sablefish). Special ichthyoplankton methods (e.g., plankton pump) developed to measure the fine-scale distribution and abundance of fish eggs are being adapted to measure these properties in near-shore regions to determine essential fish habitats.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

This project is based primarily on two NMFS Strategic Plan Objectives: 1) Build sustainable yield and 2) Ensure healthy coastal ecosystems. Sub-objectives under # 1 include assessing the status of fisheries resources, providing information for the management of fisheries to promote economic growth, and advancing fisheries prediction. The CalCOFI ichthyoplankton data base is the most extensive and complete time series of its kind in the world. It provides a unique fishery-independent means for understanding temporal and spatial fluctuations of fish stocks and associated environmental change over a broad region of the eastern Pacific Ocean. This provides the potential for a better understanding of recruitment processes and the factors that determine year-class strength. This forms the basis for more effective management of fish stocks in this region. Sub-objectives under #2 are comprehensive assessment and synthesis of coastal ecosystems leading to improved understanding of these ecosystems and improved monitoring and management. The task is developing fine-scale ichthyoplankton-based methods to study the reproductive output of specific coastal habitats. A primary objective is to integrate this data with environmental data and associated information on the distribution and abundance of juvenile and adult fishes to define essential fish habitats.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The success of this project is based on scientific advances that lead to improved understanding of the dynamic processes that regulate fluctuations in fish stocks in the California Current region. Better understanding of these processes leads to improved prediction of recruitment and year-class strength and improved management of the stocks. Clients (e.g., fisheries and fisheries managers) measure the success of this project on improved stock assessment and recruitment prediction that lead to better management and healthier fish stocks.

6. Products/Services

(1) Data and analyses leading to estimation of biomass and recruitment of fish stocks; (2) Data bases and data reports documenting changes in distribution and abundance of eggs and larvae of fish species in the California Current region from 1939 to the present; (3) Ecological, community, and time series analyses elucidating species interactions and the effects of environment on fish abundance and distribution; (4) Information on the distribution, abundance, and reproductive output of nearshore fish populations that defines essential fish habitats; (5) Scientific publications on new methodologies for assessing biomass and recruitment of important fish stocks; (6) Scientific publications documenting fish reproduction and early life history; (7) Training courses on the use of ichthyoplankton techniques in stock assessment.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Fisheries managers and councils (e.g., Pacific Fishery Management Council, Pacific States Marine Fishery Commission, State/federal management teams); regional environmental managers; fishing industry; fisheries and marine scientists in world-wide public and private institutions; private consulting firms and conservation agencies.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

This task is closely coordinated with all other tasks in the Coastal Fisheries Resources Division to define common or related objectives. The task cooperates with scientists from the California Department of Fish and Game, providing data for annual assessments of coastal pelagic fish stocks. Internationally, the task maintains links with fisheries and marine science institutions throughout the U.S. and Mexico, and gives periodic training courses. The task works particularly closely with scientists at the Scripps Institution of Oceanography.

FY 1998

CYOP Number: SWC - 318

Lab/Div: Coastal Division

Page: 1

Title: Fisheries Ecology and Assessment: CalCOFI

Leader: H. Geoffrey Moser

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task # 318	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A3A33	M	1	Complete verification and editing of identifications of CalCOFI ichthyoplankton surveys for 1985-present and collaborate with Rich Charter on updating CalCOFI data base for these surveys and producing data reports each of these surveys.	10/97	12/98
"	M	2	Produce CalCOFI Atlas summarizing the distribution and abundance of larval fishes in the Southern California Bight from 1951 to the present.	10/97	12/98
"	A	3	Groundfish biomass assessment and recruitment: continue analysis and manuscript development (Dover sole, thornyheads).	9/95	12/98
"	A	4	Collaborative studies on eggs of sardine and other fishes from plankton pump samples.	1/96	9/99
"	A	5	Manuscripts with Paul Smith (relation between larval fish assemblages and abundance; dynamic oceanographic influence on larval assemblages).	6/94	9/99

“	A	6	Continue to work up data on surface (Manta) samples from CalCOFI, MOPS, and PODS cruises and from vertical distribution cruises and produce data reports and scientific papers on these surveys.	9/96	cont.
“	A	7	Participate in market squid research cruise and conduct egg stage/duration experiment on cruise.	1/98	cont.
“	A	8	Participate with R. Vetter and his group on the Essential Fish Habitat Project. Conduct ichthyoplankton surveys of Big Sycamore and Vandenberg Marine Reserves and control sites at Anacapa and Santa Barbara Islands. Begin to identify samples when they are available.	11/97	cont.
“	A	9	Update identifications of rockfish larva in samples from the Southern California Bight from 1951 to 1969.	11/97	12/98
“	A	10	Stage eggs for annual sardine and anchovy biomass estimates.	9/97	9/98
“	A	11	Continue organization, curation, and archiving of CalCOFI ichthyoplankton collections.	9/97	cont.
“	A	12	Continue studies on reproduction and early life histories of fishes and prepare scientific manuscripts based on these studies.	9/97	cont.
“	A	13	Scientific services: Review and edit manuscripts and research proposals and participate in advisory panels.	9/97	cont.
“	A	14	Provide consultation and training related to fisheries research, ichthyoplankton methods, and reproductive biology of fishes.	9/97	cont.

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S319	CYOP TITLE:	COASTAL & PACIFIC FISH RES INVESTIGATIONS		
TASK#:	8L1A6A34	TASK TITLE:	COASTAL & PAC FISH RES INV	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
JACOBSON	SUSAN		11	8	1	
ABRAMENKOFF	DIMITRY	N	9	8	1	
MANION	SUSAN	M	9	4	0.8	
HAYS	AMY	E	7	2	1	
HADDOX	M	J	5	5	0.9	
GRIFFITH	DAVID	A	11	5	1	
CHARTER	RICHARD	L	13	0	1	
DUNN	LUCY	P	5	5	0.9	

TOTAL LABOR (\$K) (1100):	301.3
TOTAL PREMIUM PAY (1150):	97.8
TOTAL EC (1210):	63.3
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	1.6
TOTAL TASK (\$K):	464.0

0319	Lab/Div: SWFSC/CFRD	CYOP Title: Coastal & Pacific Fish. Res. Investigations	
Prepared: 12/1/97	Current Year Task #: 8L1A6A34	Task Title: Data Base & Cruise Management	
Order: Richard Charter	Prior Year Task #:		
TRAVEL COSTS		25 CONTRACTS COSTS	
Domestic:		Training:	
Per Diem	1.5	Contracts:	25.0
CalCOFI Conference	0.8		
Travel to and from ships	0.8		
Foreign:			
TOTAL TRAVEL =	3.1	TOTAL CONTRACTS =	25.0
TRANSPORTATION OF THINGS COSTS		SUPPLIES (List major expenses) COSTS	
Shipping of trawl	1.0	Jars	4.0
Egg pump to Seattle	1.0	Misc.	5.0
TOTAL TRANSPORTATION =	2.0	TOTAL SUPPLIES =	9.0
RENTS, COMM., UTIL COSTS		EQUIPMENT (List major items) COSTS	
Cellular phone	3.0	Egg pump system	15.0
		Computer	2.5
		Misc.	4.9
TOTAL R-C-U =	3.0	TOTAL EQUIPMENT =	22.4
COMPUTER COSTS		GRANTS & CO-OP AGREEMENTS COSTS	
Gov. Owned/Leased:			
Contracted:			
TOTAL COMPUTER =		TOTAL G & C-O =	
PRINTING COSTS			
TOTAL PRINTING =		TOTAL OTHER OBJECTS \$64.5	

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 319

Lab/Div: Coastal Division

Page: 1

CYOP Title: Coastal & Pacific Fisheries Resources Investigations

Leader: Richard Charter

Task Numbers 1st 8L1A6A34 2nd _____ 3rd _____ 4th _____
Task Budget Totals \$ 528.5 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 462.4 K Other Objects: \$ 66.1 K Total: \$ 528.5 K

1. Major Fisheries Associated with CYOP

1. Pacific Coast and Alaska Pelagic Fisheries (Sardine, Anchovy and Mackerel)
2. Pacific Coast Groundfish (Hake)
3. Market Squid

2. Fishery Management or Recovery Plans Associated with CYOP

1. Pacific Coast Groundfish
2. Coastal Pelagic Species (pending)
- 3.
- 4.
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This task provides the basic information required for the annual assessment of stocks supporting California coastal fisheries. This task also provides all the logistics, staffing and data management for the California Cooperative Oceanographic Fisheries Investigation (CalCOFI).

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To provide logistics, staffing and data management for the CalCOFI program.
2. To provide logistics, assist in staffing to conduct two ecological reserves cruises.
3. To provide logistics, staffing and data management for a squid research cruise.
4. To provide programming support to develop better methods of access to the CalCOFI data base.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

We will complete two CalCOFI cruise, two extended CalCOFI cruises, eight mini CalCOFI cruise (added to study El Niño), three ecological reserve cruises, one squid research cruise and a sardine egg survey cruise collecting over 1400 plankton samples. All of the data and samples from these cruises will be processed by the personnel of this task and cooperating personnel from the University of California's Scripps Institution of Oceanography. These data will be added to the historical time series. We will also be updating the CalCOFI data bases with the other fish larvae data from 1985 to present. We will also continue the Aerial Marine Resources Monitoring (AMRMS) program and update the data bases as new data becomes available.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

This project is based on the following objectives of the NMFS Southwest Region Strategic Plan: (1) Rebuild overfished marine fisheries; (2) Maintain currently productive fisheries; (3) Advance fisheries forecast and ecosystem models; (4) Integrate conservation of protected species and fisheries management; (5) Protect living marine resource habitat; (6) Improve the effectiveness of international fisheries relationships.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The completion of the 16 research cruises successfully collecting, processing data and plankton samples in a timely manner is the first measure of success. Updating the data bases and making the data available to the clients for analysis in a reasonable time frame is also a measure of success.

6. Products/Services

The major products of this task are the CalCOFI data bases, the AMRMS data base and the newly acquired squid information. Major services include logistics for all Coastal Division cruises, data base management for CalCOFI and AMRMS and assistance in the analysis of the data.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients - Pacific Fishery Management Council, Scripps Institution of Oceanography, California Department of Fish and Game and other NMFS fishery centers.
Suppliers - None.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

The principal linkages are with the other task within the Coastal Division, particularly Ecology & Systematics of Fishes CalCOFI (Dr. Moser's group) and with the Survey Systems Analysis (Dr. Smith's group). We also have close ties with Scripps Institution of Oceanography and the California Department of Fish & Game for the CalCOFI program.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1998

CYOP Number: SWC - 319

Lab/Div: Coastal Division

Page: 1

Title: Coastal & Pacific Fisheries Resources Investigations

Leader: Richard Charter

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task # 319	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A6A34	A	1	Supervise and maintain timely sorting of plankton samples	10/97	9/98
"	A	2	Edit all data collected at sea: correct all errors, enter into CalCOFI data bases	10/97	9/98
"	A	3	Design cruises patterns, establish activities, prepare cruise announcements and reports for 16 cruises	10/97	9/98
"	A	4	Prepare all seagoing equipment for cruises; design and construct experimental gear	10/97	9/98
"	A	5	Maintain close liaison with captain and crew of the R/V Jordan and staff of Marine Life Research Group at SIO	10/97	9/98
"	A	6	Maintain close liaison with captain and crew of ship of cooperative agencies	10/97	9/98
"	A	7	Consult with program leaders and retrieve data from CalCOFI data bases when needed	10/97	9/98

"	A	8	Update and maintain AMRMS (aerial survey) data bases	10/97	9/98
"	E	9	Complete the update of the OFL Manta data for the Marine Mammal MOPS cruise	10/97	6/98
"	A	10	Update the CalCOFI other fish larvae data bases for the years 1984 - 1994	10/97	2/98
"	A	11	Provide consultation to CFRD staff for all matters pertaining to purchase and maintenance of computer hardware and software	10/97	9/98
"	A	12	Provide expert advice to Center administration data management, shipboard computing, word processing and IT-95	10/97	9/98
"	E	13	Verify the 1984-1996 Other Fish Larvae data and produce a data report for each year	2/97	6/98
"	A	14	Reformat and add synonym's to all the CalCOFI tables to simplify access to the CalCOFI data	1/98	4/98
"	A	15	Develop a NMFS CalCOFI Web home page	10/97	9/98
"	A	16	Develop and run edit checks of all CalCOFI ORACLE relational data base tables with cross checks between all tables and correct any errors founds	10/97	6/98
"	A	17	Design and develop ORACLE relational data base for the Aerial Marine Resources Monitoring System	9/97	8/98
"	A	18	Design and develop a procedure to get the CalCOFI CTD data from SIO and into the NMFS CalCOFI data bases	10/97	9/98
"	E	19	Complete the re-identification of the 1951-1984 Sebastes sp. to the five identifiable species and make the correction in the database	4/98	10/98

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S320	CYOP TITLE:	SURVEY SYSTEMS ANALYSIS		
TASK#:	8L1A6A35	TASK TITLE:	SURVEY SYSTEMS DEV		DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
LO	NANCY	C	14 7	1	
BUTLER	JOHN	L	13 4	1	
SMITH	PAUL	E	14 0	1	

TOTAL LABOR (\$K) (1100):	227.1
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	47.7
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.6
TOTAL TASK (\$K):	275.4

(OTHER OBJECTS EXPENSES)

C: 320	Lab/Div: SWFSC/CFRDI	CYOP Title: Survey Systems Development and Evaluation
Prepared: 12/1/97	Current Year Task #: 8L1A6A35	Task Title: Fisheries Ecology
Leader: Paul Smith	Prior Year Task #:	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	33.0
Foreign:				
TOTAL TRAVEL =				6.2

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
				14.0
TOTAL TRANSPORTATION =				

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =				

PRINTING	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
TOTAL PRINTING =				

TOTAL OTHER OBJECTS			\$53.2
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 320

Lab/Div: Coastal Division

Page: 1

CYOP Title: Survey Systems Development and Evaluation

Leader: Paul Smith

Task Numbers 1st 8L1A6A35 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 328.6 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 274.8 K Other Objects: \$ 53.8 K Total: \$ 328.6 K

1. Major Fisheries Associated with CYOP

1. Market Squid
2. Pacific coast demersal fisheries
3. Pacific coast pelagic fisheries

2. Fishery Management or Recovery Plans Associated with CYOP

1. Assess Status of Pelagic fisheries developing LIDAR Airborne surveys
2. Expand ecosystems monitoring - squid spawning areas
3. Advance fishery prediction - hake recruitment
4. Advance fishery prediction - anchovy recruitment
5. Advance fishery prediction - blackgill rockfish recruitment
6. Assess Status of Pacific hake - Geostatistics of spawning pattern

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

While the management of all fisheries must consider recruitment limitations, fisheries on stocks which have short life histories, like squid, sardines, anchovies etc. require special monitoring of the early stages of the life history and their environment so that management information is available before harvest policies are set. Costs of monitoring are linked to the logistics of sampling and the precision required. We have converted all monitoring to quantitative

assessment models which improve precision where funds and ship time are available, or limit the quality of estimates where funds have been limiting.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To assist in developing the population harvest and environmental information infrastructure required for setting realistic yields for the known distribution of Market squid, *Loligo opalescens*.
2. To continue and refine the monitoring of the anchovy, sardine, hake, mackerel and jack mackerel populations using standard methods and developing egg pump, acoustics and LIDAR techniques.
3. To develop from historical data, leading habitat, community and physical indicators of spawning success and recruitment for the pelagic fish complex.
4. To develop overviews of the management process leading to multi-species and advanced environmental models

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Fisheries independent surveys of eggs, larvae and juveniles are used to augment and confirm spatial distribution and temporal rates of change of resource species. Retrospective analyses provide insight into mechanisms of population control and production.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Interpretation of trends, especially during climatic extremes, provides new approaches to management problems with temperate coastal pelagic species.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Management agencies, locally, regionally, and internationally have a suite of documented (cost/precision) techniques available to implement fisheries independent assessments of troubled stocks.

6. Products/Services

- Data from egg production time series
- Data from larval surveys
- Data on age composition and growth
- Documentation on Aerial surveys
- Documentation on Egg Production Surveys
- Documentation on LIDAR survey techniques
- Peer-reviewed publications on the efficacy of assessment and recruitment prediction progress.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

- Clients
- Suppliers

Fisheries managers and councils (e.g., Pacific Fishery Management Council, Pacific States Marine Fishery Commission, State/federal management teams); regional environmental managers; fishing industry; fisheries and marine scientists in world-wide public and private institutions; private consulting firms and conservation agencies

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

This task works with all other tasks in the Coastal Fisheries Resources Division, especially with Rich Charter's, Geoff Moser's, and Larry Jacobson's tasks. The task cooperates with scientists from the California Department of Fish and Game and Scripps Institution of Oceanography. The task maintains links with fisheries and marine science institutions throughout the U.S. and Mexico.

CURRENT YEAR OPERATING PLAN - FORM 5

FY 1998

CYOP Number: SWC - 320

Lab/Div: Coastal Division

Page: 1

Title: Survey Systems Development and Evaluation

Leader: Paul Smith

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #320	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A6A35	E	1	Smith Paper on future of fisheries oceanography - ala CalCOFI	12/97	3/98
"	E	2	Smith Paper on Habitat Indicators of Fish Production w/Moser	11/97	2/98
"	E	3	Lo Paper on Modeling LIDAR Survey Procedures w/Hunter&Churnside	10/97	4/98
"	A	4	Butler Cruise to initiate Squid Biology Research w/CDF&G	12/97	2/98
"	A	5	Lo Daily Egg Production Model of sardine biomass using continuous egg pump (CUFES) and CalVET samples	10/97	5/98
"	A	6	Lo Daily Egg Production Manual for pelagic fish using CUFES	1/98	1/99
"	A	7	Lo Participate in an interagency development of port sampling plan with CDF&G	11/97	4/98
"	E	8	Lo, Griffith, Hunter - Using a restricted cluster adaptive sampling technique to estimate hake larval abundance	10/96	10/97
"	E	9	Lo, Moser, Smith Vertical Distribution of Pacific hake eggs in relation to stage of development and temperature	10/96	10/97

“	A	10	Light trap study of vertical distribution of squid larvae	1/98	10/98
“	A	11	Age and Growth Rate of squid	11/97	1/99

SOUTHWEST FISHERIES SCIENCE CENTER

CYOP FINANCIAL DATA

(PERSONNEL)

FY 1998

CYOP:	S330	CYOP TITLE:	COMM & REC FISH RES FOR MGMT		
TASK#:	8L1C2A30	TASK TITLE:	COMM & REC FISH RES FOR MGT		
			DATE:	26-Jan-98	

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
SQUIRES	DALE	E	14 3	1	
HERRICK JR	SAMUEL	F	13 0	1	
JACOBSON	LAWRENCE	D	14 0	1	QSI

TOTAL LABOR (\$K) (1100):	215.9
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	45.3
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.6
TOTAL TASK (\$K):	261.8

(OTHER OBJECTS EXPENSES)

TOTAL OTHER OBJECTS	\$35.4
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 330

Lab/Div: Coastal Division

Page: 1

CYOP Title: Commercial and Recreational Fisheries Research for Management

Leader: Lawrence D. Jacobson

1. Task Numbers 1st 8L1C2A30 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 297.2 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 261.2 K Other Objects: \$ 36.0 K Total: \$ 297.2 K

1. Major Fisheries Associated with CYOP

1. Coastal Pelagic Species Fishery
2. West Coast Groundfish Fishery
3. West Coast Salmon Fishery

2. Fishery Management or Recovery Plans Associated with CYOP

1. Northern Anchovy Fishery Management Plan
2. Coastal Pelagic Species Fishery Management Plan
3. Pacific Coast Groundfish Fishery Management Plan
4. Pacific Coast Salmon Fishery Management Plan

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

What are maximum sustained and optimum yield and how can these be obtained from coastal pelagic and groundfish fisheries?

How should limited entry systems be designed?

How can scientists predict and estimate economic and biological effects of management actions?

How can biological and economic problems be solved at minimum cost?

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To provide the scientific and technical basis for managing the coastal pelagic species and groundfish fisheries.
2. To predict economic effects of fishery management decisions.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Biological and economic models based on data collected by other tasks and agencies.

Outreach and collaboration with managers (Pacific Fishery Management Council and California Department of Fish and Game).

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Coastal pelagic fisheries are among the largest on the west coast. Pelagics are important forage items for many predators including commercially and recreationally important fish, marine mammals, birds and several endangered or threatened species. NMFS, the California Department of Fish and Game and the Pacific Fishery Management Council are developing an FMP for the coastal pelagic fishery. California is unable to monitor, assess or manage coastal pelagic species without assistance.

Stock assessments, stock assessment reviews and economic factors are increasingly important in FMP management of groundfish as stock have become fully exploited and the fishery overcapitalized. All management measures have economic dimensions that must be analyzed. This task supplies a significant fraction of the coast wide economic and stock assessment expertise.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Working in collaboration with the California Department of Fish, technically sound stock assessments are finished on time for northern anchovy, Pacific mackerel, and Pacific sardine.

Draft FMP's and FMP amendments for coastal pelagic and other species are completed on time.

Economic analysis of management actions in the groundfish and coastal pelagic species fisheries are completed on time.

Scientists publish at least one paper in peer-reviewed scientific journals per year.

6. Products/Services

FMP's and FMP amendments.
Stock assessments.

Economic analyses.
Scientific reviews.
Scientific papers.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: Pacific Fishery Management Council; California Department of Fish and Game; Oregon Department of Fish and Wildlife; Washington Department of Fisheries.

Suppliers: PacFIN; California Department of Fish and Game; other tasks in Division.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Pacific Fishery Management Council

California Department of Fish and Game

Other NMFS laboratories: SWFSC, Tiburon Lab; AKFSC, Seattle; NWFSC, Newport.

FY 1998

CYOP Number: SWC - 330

Lab/Div: Coastal Division

Page: 1

Title: Commercial and Recreational Fisheries Research for Management

Leader: Lawrence D. Jacobson

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #330	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C2A30	M	1	Work with CDF&G to complete stock assessment for Pacific sardine	10/97	12/97
"	M	2	Hold FAO/NMFS/Japan Expert Consultancy on Fishing Capacity	10/97	6/98
"	M	3	Work with CDF&G to complete stock assessment for Pacific mackerel	5/98	7/98
"	M	4	Complete description of California groundfish fishery	10/97	9/98
"	M	5	Complete draft FMP for Coastal Pelagic Species	10/97	9/98
"	M	6	Complete stock assessment and report for northern anchovy off southern and central California.	10/97	8/98

Pelagic Fisheries Resources Division

SOUTHWEST FISHERIES SCIENCE CENTER

CYOP FINANCIAL DATA

(PERSONNEL)

FY 1998

YOP:	S401	CYOP TITLE:	LARGE PELAGICS STOCK INVESTIGATION		
ASK#:	8L1A6A40	TASK TITLE:	ALBACORE & SHARKS INVESTIGATION	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
AU	DAVID	W	13	8	1	
BARTOO	NORMAN	W	14	8	1	
RAMON	DARLENE	A	7	4	1	
SMITH	SUSAN	E	12	7	1	

TOTAL LABOR (\$K) (1100):	237.7
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	49.9
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.8
TOTAL TASK (\$K):	288.4

401	Lab/Div: Pelagic Fisheries Resources Division	CYOP Title: Stock Assessment and Ecology
Prepared:	Current Year Task #: 8L1A6A40	Task Title: Albacore and Shark Investigations
Order: Norm Bartoo	Prior Year Task #: 8L1A6A40	

22	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =	114.1
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	RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
	UCSD Tape Storage	2.0		Microscope Light Pipe	3.0

Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =				

TOTAL OTHER OBJECTS	\$169.2
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SOUTHWEST FISHERIES SCIENCE CENTER

CYOP FINANCIAL DATA

(PERSONNEL)

FY 1998

CYOP:	S401	CYOP TITLE:	LARGE PELAGICS STOCK INVESTIGATION		
TASK#:	8L1A6A41	TASK TITLE:	BILLFISH INVESTIGATION	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
HOLTS	DAVID	B	12 5	1	

TOTAL LABOR (\$K) (1100):	54.3
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	11.4
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	65.9

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

P-01		Lab/Div: Pelagic Fisheries Resources Division		CYOP Title: Stock Assessment and Ecology	
Prepared:		Current Year Task #: 8L1A6A41		Task Title: Billfish Investigation	
Prepared by: Norm Bartoo		Prior Year Task #: 8L1A6A41			
1		TRAVEL		25	
		COSTS		CONTRACTS	
Domestic: AES		1.5		Training:	
SEEC/Tagging		1.0		Contracts:	
Foreign:					
TOTAL TRAVEL =		2.5			
2		TRANSPORTATION OF THINGS		TOTAL CONTRACTS =	
		COSTS			
				26	
				SUPPLIES (List major expenses)	
				Billfish Taggs	
				2.0	
TOTAL TRANSPORTATION =				TOTAL SUPPLIES =	
				2.0	
3		RENTS, COMM., UTIL		31	
				EQUIPMENT (List major items)	
TOTAL R-C-U =				TOTAL EQUIPMENT =	
4		COMPUTER		41	
		COSTS		GRANTS & CO-OP AGREEMENTS	
Gov. Owned/Leased:					
Contracted:					
TOTAL COMPUTER =				TOTAL G & C-O =	
5		PRINTING			
		COSTS			
Newsletter		1.7			
Survey		0.4			
TOTAL PRINTING =		2.1		TOTAL OTHER OBJECTS	
				\$6.6	

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S401 **Lab/Div:** Pelagic Fisheries Resources Division **Page:** 1

CYOP Title: Stock Assessment and Ecology

Leader: Norm Bartoo

Task Numbers 1st 8L1A6A40 2nd 8L1A6A41 3rd _____ 4th _____

Task Budget Totals \$ 457.6 K \$ 72.5 K \$ _____ K \$ _____ K

Budget Totals:

Personnel: \$ 353.3 K Other Objects: \$ 176.8 K Total: \$ 530.1 K

1. Major Fisheries Associated with CYOP

1. Pacific Ocean Highly Migratory Species Fisheries
2. Indian Ocean Highly Migratory Species Fisheries
3. Atlantic Ocean Highly Migratory Species Fisheries

2. Fishery Management or Recovery Plans Associated with CYOP

1. North Pacific Albacore Workshop
2. Interim Scientific Committee North Pacific Highly Migratory Species
3. Inter-American Tropical Tuna Commission
4. Western Pacific Fishery Management Council
5. Coastal Marine Mammals

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This task investigates and provides advice and information on stocks of large pelagics found in both the Oceanic ecosystem and the California Current ecosystems of the Pacific Ocean. Investigations and work plans are formulated to meet requirements specified by NMFS resource managers, international fisheries agreements (IATTC, ICCAT, IOFC, IPTP, South Pacific Tuna Treaty) and regional fisheries management councils (Pacific and Western Pacific). The data and advice are used in management negotiations and discussions regarding access exploitation, rebuilding, and protection of the resources, and for management of the fisheries. Accomplishments of this task directly support the NMFS

objectives of maintaining currently productive fisheries and improving the effectiveness of international fisheries relationships.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To produce up-to-date stock assessments.
2. To provide fisheries forecasts for west coast albacore fisheries.
3. To contribute information on the population biology of North Pacific tunas, billfishes and sharks.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

This task collects data and biological information developed from experiments and fishery sampling and integrates similar data generated by related tasks. The adequacy and accuracy of data and information are assessed, and appropriate fisheries and ecological models are employed or developed to produce required assessments and advice.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Activities are carried out to support U.S. formal and informal agreements with foreign countries and international organizations and domestic management effort.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Success is measured by timely availability of stock assessment advice and scientific fishery information.

6. Products/Services

Products are scientific reports and publications providing assessments and ecological information and data on stocks and fisheries as required. Products are distributed in the form of internal report, newsletters, SWFC Administrative Reports, NOAA Technical Memorandums, and various technical publications.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients	Principal clients include NMFS managers, U.S. Government commissioners to international organizations, SSC of regional councils, industry leaders, and SWFSC scientists.
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Suppliers	Inputs are from industry leaders and foreign scientists.
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8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

This CYOP is linked to CYOP 411, 421 and 431 at SWC1, and CYOP 720, 721 and 722 at SWC2.

FY 1998

CYOP Number: SWC - S401

Lab/Div: Pelagic Fisheries Resources Division

Page: 1

Title: Stock Assessment and Ecology (Albacore and Shark Investigations/Billfish Investigations)

Leader: Norm Bartoo

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A6A40	A	1	Produce and publish SOS Reports. Support Western Pacific Council large pelagics team.	Oct 97	Sep 98
8L1A6A40	A	2	Prepare Albacore Forecast/maintain constituent contacts.	Oct 97	Sep 98
8L1A6A40	E	3	Participate in 2 Interim Scientific Committee meetings.	Nov 97	Aug 98
8L1A6A40	E	4	Participate in 15th North Pacific Albacore Workshop; develop SBI's and execute research plan with colleagues.	Dec 97	Sep 98
8L1A6A40	A	5	Publish results on North Pacific albacore maturity/spawning; analyze North Pacific decadal effects of climate; specific biological indicators.	Oct 97	Sep 98
8L1A6A40	A	6	Publish results of Shark Survey Cruises	Oct 97	May 98
8L1A6A40	A	7	Conduct and report on mako index cruise; develop cruise for thresher sharks.	Oct 97	Sep 98
8L1A6A41	M	8	Publish Billfish Newsletter	Jan 98	Jun 98
8L1A6A41	A	9	Distribute billfish tags and maintain release-return records.	Oct 97	Sep 98
8L1A6A41	A	10	Incorporate TBF tag data into data base.	Oct 97	Sep 98

SOUTHWEST FISHERIES SCIENCE CENTER

CYOP FINANCIAL DATA

(PERSONNEL)

FY 1998

YOP:	S411	CYOP TITLE:	MULTISPECIES DATA COLLECTION & EVALUATION	
TASK#:	8L1A6A42	TASK TITLE:	LARGE PELAGICS DATA SYSTEMS	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
DEALY	DONNA	D	9 4	1	
JACKSON	ALAN	R	11 5	1	
COAN JR	ATILIO	L	13 0	1	
CHILDERS	JOHN	F	7 4	1	
PRESCOTT	DOUGLAS	W	9 5	1	

TOTAL LABOR (\$K) (1100):	216.9
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	45.5
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	1.0
TOTAL TASK (\$K):	263.4

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

06411	Lab/Div: Pelagic Fisheries Resources Division	CYOP Title: Multispecies Data Collection and Evaluation
Prepared:	Current Year Task #: 8L1A6A42	Task Title: Large Pelagic Data Systems
Leader: Al Coan	Prior Year Task #: 8L1A6A42	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic: WPYRG	3.0		Training:	
P.S. Observer	2.0		Contracts:	
Tuna Conference	0.6			
Foreign: Albacore Workshop	1.2			
TOTAL TRAVEL =	6.8			

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
			P.S. Vessel Costs	23.0
			Data Entry	5.5
			Sampling	2.0
				30.5
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
Equipment Maintenance	5.3		Computer Upgrade	6.0
U.C.S.D. Line Charge	0.6			
Data Storage	1.0			
TOTAL R-C-U =	6.9			

COMPUTER	COSTS	TOTAL EQUIPMENT = 6.0		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =				

PRINTING	COSTS	TOTAL G & C-O =		
Albacore Report	0.7			
Tuna Newsletter	0.8			
Albacore Logbooks	3.0			
TOTAL PRINTING =	4.5			

TOTAL OTHER OBJECTS	\$54.7
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S411	CYOP TITLE:	MULTISPECIES DATA COLLECTION & EVALUATION		
TASK#:	8L1C1V40	TASK TITLE:	BY-CATCH DATA SYSTEMS	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
RASMUSSEN	RANDALL	C	9 9	1	
SHOW	CHRISTINA	H	11 8	1	
WALLACE	KENNETH	E	12 6	1	

TOTAL LABOR (\$K) (1100):	145.5
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	30.6
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.6
TOTAL TASK (\$K):	176.7

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

01411	Lab/Div: Pelagic Fisheries Resources Division	CYOP Title: Multispecies Data Collection and Evaluation
Prepared:	Current Year Task #: 8L1C1V40	Task Title: By-Catch Data Systems
Order: Al Coan	Prior Year Task #: 8L1C1V40	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
Media Storage	0.5			
TOTAL R-C-U =			TOTAL EQUIPMENT =	
COMPUTER				
	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS			
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$0.5
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S411 **Lab/Div:** Pelagic Fisheries Resources Division **Page:** 1

CYOP Title: Multispecies Data Collection and Evaluation

Leader: Al Coan

Task Numbers	1st	<u>8L1A6A42</u>	2nd	<u>8L1C1V40</u>	3rd	<u> </u>	4th	<u> </u>
Task Budget Totals	\$	<u>318.1</u>	K	\$	<u>177.2</u>	K	\$	<u> </u> K

CYOP Budget Totals:

Personnel: \$ 438.5 K Other Objects: \$ 56.8 K Total: \$ 495.3 K

1. Major Fisheries Associated with CYOP

1. Pacific Ocean Highly Migratory Species Fisheries
2. Indian Ocean Highly Migratory Species Fisheries
3. Atlantic Ocean Highly Migratory Species Fisheries

2. Fishery Management or Recovery Plans Associated with CYOP

1. South Pacific Tuna Treaty
2. Interim Scientific Committee North Pacific Highly Migratory Species
3. Inter-American Tropical Tuna Commission
4. Indo-Pacific Tuna Program
5. Coastal Marine Mammals.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Monitoring ecosystems and forecasting changes in marine resources require collection of data pertinent to the resource and environment, review, analysis and dissemination of these data. The objective of this task is to collect required data from various published sources, from established scientific working groups, exchange agreements, and from actual field sampling programs. This task is also responsible for using state of the art automated data systems for archiving and processing the data. Data collection and analyses being maintained include Atlantic, Pacific, and Indian Ocean large pelagics data and marine mammal observer data. Accomplishment of this task contributes directly to the NMFS objectives of maintaining

currently productive fisheries, rebuilding fisheries, integrating conservation of protected species and improving the effectiveness of international fisheries relationships.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To process and maintain data for a SWC global tuna base and analysis.
2. To manage data collected on marine mammals.
3. To evaluate sampling design and provide support for sampling activities.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

This task routinely handles tuna-dolphin observer data, coastal gillnet observer data, tuna fisheries data, and other data collected from field experiments, expeditions, and port sampling. Various other sources including publications, international contacts, data exchange agreements, etc., are used. This task also uses statistical methodologies to develop and maintain field sampling programs for the collection of information on fisheries for large pelagics, and for collection of information on marine mammals. Up-to-date computer technologies are used to develop and maintain data base systems and to provide software for supporting analyses of oceanic and California Current ecosystems, and resources forecasting for large pelagic stocks and marine mammals.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Activities are carried out to support U.S. formal and informal agreements with foreign countries and international organizations.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Success is measured by the availability of fishery statistics, data bases and software for stock assessment studies and other research. Also included would be fisheries reports and data collection systems.

6. Products/Services

Principal products of this task are software, data bases and data collection systems in support of research. This task provides annual summaries and analyses of data by fisheries for use in stock assessments and fisheries evaluations.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

(Clients	Products and services produced by this task are made available for use by other SWFSC tasks for various foreign and domestic fisheries management organizations, NOAA fishery administrators, industry and constituency groups and fishery managers. Data are also used by constituency groups involved in
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fishery development, and marine mammal and large pelagics issues.

Suppliers

The project is dependent on fishery constituents (vessel captains, canneries), scientific working groups, and international organizations for inputs of fishery data.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

This CYOP is linked to CYOP 401, 421, and 431 at SWC1, and CYOP 720, 721, and 722 and SWC2.

CYOP Number: SWC - S411

Lab/Div: Pelagic Fisheries Resources Division

Page: 1

Title: Multispecies Data Collection and Evaluation (Large Pelagics Data Systems/By-Catch Data Systems)

Leader: Al Coan

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A6A42	A	1	Develop and maintain data bases for Pacific Ocean and Indian Ocean tunas and other large pelagics.	Oct 97	Sep 98
8L1A6A42	M	2	Produce report summarizing data for the 1996-97 U.S. fisheries for albacore in the North and South Pacific Ocean.	Oct 97	Jul 98
8L1A6A42	A	3	Process and submit data from South Pacific Tuna Treaty.	Oct 97	Aug 98
8L1A6A42	A	4	Provide PFRD with software and hardware support.	Oct 97	Sep 98
8L1A6A42	A	5	Test, modify, and load an ORACLE databases system for fisheries data held by PFRD.	Oct 97	Sep 98
8L1A6A42	E	6	Produce report summarizing data for the 1997 U.S. purse seine fishery in the central-western Pacific.	Oct 97	Mar 98
8L1C1V40	A	7	Provide MMD with software and hardware support.	Oct 97	Sep 98
8L1C1V40	A	8	Produce comprehensive data base edits in support of marine mammal observer data analyses.	Oct 97	Sep 98
8L1C1V40	E	9	Develop and maintain data bases for marine mammals.	Oct 97	Sep 98
8L1C1V40	E	10	Participate in and process data from eastern tropical Pacific marine mammal research cruises.	Oct 97	Sep 98

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S421	CYOP TITLE:	OCEANIC FISHERIES INVESTIGATION		
SK#:	8L1C1AM8	TASK TITLE:	PELAGIC FISHERIES EVALUATION	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
DELAFUENTE	MICHELLE	A	7 7	1	
SAKAGAWA	GARY	T	15 0	1	

TOTAL LABOR (\$K) (1100):	132.8
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	27.9
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.4
TOTAL TASK (\$K):	161.1

021	Lab/Div: Pelagic Fisheries Resources Division	CYOP Title: Fisheries Evaluation	
Prepared: Nov 97	Current Year Task #: 8L1C1AM8	Task Title: Pelagic Fisheries Evaluation	
Preparer: Gary Sakagawa	Prior Year Task #: 8L1C1AM8		
TRAVEL COSTS		25 CONTRACTS COSTS	
Domestic:	11.0	Training:	
		Contracts:	
		Copier Maintenance	0.8
		Printer Maintenance	0.3
Foreign:	16.0		
TOTAL TRAVEL =	27.0		
TRANSPORTATION OF THINGS COSTS		TOTAL CONTRACTS = 1.1	
Shipping	0.2	26 SUPPLIES (List major expenses) COSTS	
		Office Supplies	2.9
		WPYRG Support	2.0
		By-catch Study (Reserve)	3.2
TOTAL TRANSPORTATION =	0.2	TOTAL SUPPLIES = 8.1	
RENTS, COMM., UTIL		31 EQUIPMENT (List major items) COSTS	
		Equipment Replacement	2.0
TOTAL R-C-U =			
COMPUTER COSTS		TOTAL EQUIPMENT = 2.0	
Gov. Owned/Leased:		41 GRANTS & CO-OP AGREEMENTS COSTS	
Contracted:			
TOTAL COMPUTER =			
PRINTING COSTS		TOTAL G & C-O =	
WPYRG Report	1.5		
Reprints	0.5		
TOTAL PRINTING =	2.0		
		TOTAL OTHER OBJECTS \$40.4	

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

421	Lab/Div: Pelagic Fisheries Resources Division	CYOP Title: Fisheries Evaluation
Approved: Nov 97	Current Year Task #: 8L1C1AM9	Task Title: Pelagic Fisheries Evaluation
Prepared by: Gary Sakagawa	Prior Year Task #: 8L1C1AM9	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
Shipping		26	SUPPLIES (List major expenses)	COSTS
			KMT	6.0
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 6.0	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
Copier Maintenance				
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS			
Tuna Newsletter	1.6			
TOTAL PRINTING = 1.6				

TOTAL OTHER OBJECTS	\$7.6
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S421 **Lab/Div:** Pelagic Fisheries Resources Division **Page:** 1

CYOP Title: Pelagic Fisheries Evaluation

Leader: Gary Sakagawa

Task Numbers 1st 8L1C1AM8 2nd 8L1C1AM9 3rd _____ 4th _____

Task Budget Totals \$ 201.5 K \$ 7.6 K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 160.7 K Other Objects: \$ 48.4 K Total: \$ 209.1 K

11. Major Fisheries Associated with CYOP

- 1. Pacific highly migratory species fisheries
- 2.
- 3.

22. Fishery Management or Recovery Plans Associated with CYOP

- 1. South Pacific Tuna Treaty
- 2. Interim Scientific Committee for North Pacific HMS
- 3. Inter-American Tropical Tuna Commission
- 4.
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This task monitors tuna fisheries production, developments, and trade on a global scale for analyses of stock condition and fisheries performance. Liaison with foreign scientists is an ongoing activity of this task as a means of securing fishery and scientific data on exploited stocks and for coordinating SWFSC scientists' involvement in international research projects.

4. **Objectives** (What are the major objectives being pursued by this CYOP?)

- To conduct biological and ecological research for stock assessments.
- To provide up-to-date scientific information and advice for maintaining healthy stocks.
- To provide fisheries statistics to increase long-term economic and social benefit.

5. **Methodology/Approach** (How are the objectives being approached: what are the tactics that are being applied?)

Informal and formal agreements for exchange of fishery data and information and for cooperative scientific investigations are used in a network with both international and domestic sources. This network is used to secure up-to-date data and information, to conduct collaborative research, and to conduct stock assessments.

6. **Why is this project important?** (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Activities are carried out to support U.S. formal and informal agreements with foreign countries and international organizations. Activities are designed to support the NMFS mission and strategic plan goal of sustainable fisheries.

6. **Measure of Success** (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Key measures of success are: maintenance of healthy stocks and reduced risk of overfishing; maintenance of open dialogue and cooperation with constituents and other interested parties.

6. **Products/Services**

Results of this task are prepared for publication in scientific journal, internal reports and newsletters, and for oral presentations to NMFS managers, U.S. delegations, etc. This task also serves as a public source for current data and information on the tuna fisheries and condition of the tuna stocks. A visible product of this task is the quarterly newsletter, "Tuna Newsletter", which is available to collaborators and the public. Results of this task contribute to the NMFS strategic initiative of rebuilding U.S. fisheries by reducing overfishing and maintaining current productive fisheries.

7. **Clients/Suppliers** (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: NMFS administrators, DoS negotiators, tuna industry, councils, public
Suppliers: Inputs are received from the tuna industry (fishermen, processors), scientists and agencies.

13. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Collaboration is broad and include HL staff, California Department of Fish and Game, colleagues working in international organizations, IATTC, SPC, FFA, FAO and foreign organizations. About 50% of the budget is devoted to maintaining collaboration.

FY 1998

CYOP Number: SWC - S421

Lab/Div: Pelagic Fisheries Resources Division

Page: 1

Title: Pelagic Fisheries Evaluation

Leader: Gary Sakagawa

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C1AM8	A	1	Provide scientific advice, as required for international agreements, and Council FMPS.	Oct 97	Sep 98
8L1C1AM8 8L1C1AM9	A	2	Obtain fishery data from international sources for studies on tuna stock condition and for evaluation of fisheries condition	Oct 97	Sep 98
8L1C1AM8	A	3	Keep abreast of SWFSC highly migratory species research and supervise maintenance of the global data base.	Oct 97	Sep 98
8L1C1AM8	A	4	Prepare background paper on U.S. tuna fisheries for FFA-U.S. consultation.	Oct 97	Mar 98
8L1C1AM8	A	5	Organize 8th Yellowfin Tuna Working Group meeting for SCTB.	Oct 97	Jun 98
8L1C1AM8	A	6	Publish and distribute the report of the 7th meeting of the Western Pacific Yellowfin Tuna Research Group (WPYRG).	Oct 97	Mar 98
8L1C1AM8	A	7	Provide scientific information for multi-lateral negotiations (MHLIC).	Oct 97	Sep 98

Marine Mammal Division

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S500	CYOP TITLE:	MMD ADMINISTRATION	
TASK#:	8L1C4V50	TASK TITLE:	MARINE MAMMAL ADMINISTRATION	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
FAIRFIELD	CAROL	P	13	6	1	
HANDSCHUH	KAREN	R	7	7	1	
DONAHUE	MEGHAN	A	9	1	1	
BROWNELL JR	ROBERT	L	15	0	1	

TOTAL LABOR (\$K) (1100):	227.2
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	47.7
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.8
TOTAL TASK (\$K):	275.7

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

\$500	Lab/Div: SWFSC/MMD	CYOP Title: MARINE MAMMAL ADMINISTRATION
Prepared: NOV. 1997	Current Year Task #: 8L1C4V50	Task Title: MARINE MAMMAL ADMINISTRATION
Leader: BROWNELL	Prior Year Task #: 8L1C4V50	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	4.0		Training:	
			Contracts:	
Foreign:	10.1			
TOTAL TRAVEL =				14.1

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
				5.0
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 5.0	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
				7.0
TOTAL R-C-U =			TOTAL EQUIPMENT = 7.0	

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS
TOTAL PRINTING =	

TOTAL OTHER OBJECTS	\$26.1
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S500

Lab/Div: Marine Mammal Division, La Jolla

Page: 1

CYOP Title: Marine Mammal Administration

Leader: Brownell

Task Numbers 1st 8L1C4V50 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 301.8 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 274.9 K Other Objects: \$ 26.9 K Total: \$ 301.8 K

1. Major Fisheries Associated with CYOP

- 1.
- 2.
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This task involves the coordination of activities and dissemination of the results of research conducted by the Marine Mammal Division.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To coordinate Marine Mammal Division research activities

2. To disseminate Marine Mammal Division research results to the public, Congress, Marine Mammal Commission, International Whaling Commission, industry, non-government organizations, other government agencies, international organizations, international resource managers, and NMFS headquarters.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

By attending and conducting meetings and workshops regarding marine mammal populations and their ecological relationships in addition to providing reports on the results of research conducted by the Marine Mammal Division.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

NOAA Strategic Plan

Reducing bycatch

Research on bycatch by coastal gillnets, high seas driftnet, and tuna purse seines

Assist status of protected species

Obtain information for status of stock reports for all marine mammals in the Pacific Region of U.S. waters

Reduce marine mammal-fishery interactions

Obtain estimates of mortality for observed fisheries

Implement recover/conservation plans

Participate on recovery teams and panels for protected species

Take a proactive approach/prevent listings

Monitor marine mammal populations to obtain accurate information which can be used to assess their status

Expand ecosystem monitoring

Obtain habitat information for marine mammals

MMPA and ESA

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The information generated is used by NMFS to evaluate management options for the protection of pinnipeds, and cetaceans, as well as ETP dolphin stocks, and other marine mammal stocks inhabiting waters of the U.S. Pacific Region. Up-to-date information on the condition of these marine mammal populations is a key requirement for the successful evaluation and selection of management options.

6. Products/Services

Products of this program, which consist of reports, scientific publications, and personnel expertise, are used by NMFS and other responsible organizations charged with drafting marine mammal management

measures for U.S. and international resource managers.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: NMFS (Headquarters, F/PR, other Science Centers, SWR), Department of State, the public, Congress, Marine Mammal Commission, International Whaling Commission, industry, non-government organizations, other government agencies, international organizations, and international resource managers.

Suppliers

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWC1/MMD 510, 520, 530, 540, 550, 560, SWR, NMFS HQ.

FY 1998

CYOP Number: SWC - S500

Lab/Div: SWC/MMD

Page: 1

Title: Marine Mammal Administration

Leader: Brownell

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C4V50	A		Participate in scientific committee meetings of the IWC, intercessional meetings, and Marine Mammal Commission meetings.		
8L1C4V50	A		Continue international research/management efforts on vaquita, baiji, Chilean dolphins, endangered populations of large whales, etc.		
8L1C4V50	A		Provide annual reports to the IWC, MMC, F/PR, ICES, on marine mammal research and results.		
8L1C4V50	A		Review NMFS marine mammal scientific research permits		

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S510	CYOP TITLE:	DOLPHIN STOCK ASSESSMENT		
TASK#:	8L1C4V51	TASK TITLE:	MM STOCK ASSESSMENT	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
GERRODETTE	TIMOTHY		14 0	1	

TOTAL LABOR (\$K) (1100):	75.2
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	15.8
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	91.2

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

CYOP # 510	Lab/Div: SWFSC/MMD	CYOP Title: DOLPHIN STOCK ASSESSMENT PROGRAM
Prepared: NOV. 1997	Current Year Task #: 8L1C4V51	Task Title: DOLPHIN STOCK ASSESSMENT PROGRAM
Order: GERRODETTE	Prior Year Task #: 8L1C4V51	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	10.0
Foreign:	3.0			
TOTAL TRAVEL =			3.0	

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 10.0		
		26	SUPPLIES (List major expenses)	COSTS
				1.0
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 1.0	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =			TOTAL EQUIPMENT =	

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS	TOTAL OTHER OBJECTS \$14.0		
TOTAL PRINTING =				

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S510 **Lab/Div:** Marine Mammal Division, La Jolla **Page:** 1

CYOP Title: Dolphin Stock Assessment Program

Leader: Gerrodette

Task Numbers 1st 8L1C4V51 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 105.2 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 91.0 K Other Objects: \$ 14.2 K Total: \$ 105.2 K

1. Major Fisheries Associated with CYOP

1. ETP yellowfin tuna purse seine fishery

2.

3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. International Dolphin Conservation Program

2.

3.

4.

5.

6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This task involves research on the abundance and distribution of dolphins associated with the eastern tropical Pacific yellowfin tuna purse seine fishery. It provides information needed to assess NMFS' management practices in this fishery, as mandated by the MMPA.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To assess the current status of all dolphin stocks affected by the ETP tuna purse seine fishery.
2. To use data collected on the ETP surveys to improve future cetacean surveys.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

a) The Bayesian model developed by Paul Wade in his thesis will be applied to combine mortality data with absolute and relative abundance estimates to estimate the current status of dolphin populations.

b) Data collected on research cruises will be analyzed to assess accuracy of distance estimation to marine mammal sightings, to produce improved methods of group size estimation, and to model factors affecting detection probability.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Estimating ETP dolphin population sizes as mandated by the MMPA. Proposed international management of the ETP tuna Fishery (Declaration of Panama and associated U.S. legislation) requires estimates of dolphin population sizes, which may involve the NMFS.

NOAA Strategic Plan

Reducing bycatch

Research on bycatch by coastal gillnets, high seas driftnet, and tuna purse seines

Assist status of protected species

Obtain information for status of stock reports for all marine mammals in the Pacific Region of U.S. waters

Reduce marine mammal-fishery interactions

Obtain estimates of mortality for observed fisheries

Implement recover/conservation plans

Participate on recovery teams and panels for protected species

Take a proactive approach/prevent listings

Monitor marine mammal populations to obtain accurate information which can be used to assess their status

Expand ecosystem monitoring

Obtain habitat information for marine mammals

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Well-designed surveys.

Appropriate analysis of data.

Dissemination of results at meetings and in publications.

6. Products/Services

Publication of research results on ETP dolphin stock sizes, interaction with the tuna fishery, and estimation of status.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: NMFS, Marine Mammal Commission, IATTC, tuna industry, environmental groups.

Suppliers

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWC1/MMD 500,520, 530, 540, 550; F/PR; DoS; NMFS HQ

CYOP Number: SWC - S510

Lab/Div: SWC/MMD

Page: 1

Title: MM Stock Assessment

Leader: Gerrodette

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C4V51	A		Paper on status of ETP dolphin populations coauthored with Paul Wade		May
8L1C4V51	A		Analyze results of vaquita cruise		Sep.
8L1C4V51	A		Teach course on methods of estimating marine mammal abundance at CICIMAR, La Paz		Apr.
8L1C4V51	M		Produce paper on estimating relative abundance with sightability factors.		Jan.
8L1C4V51	A		Produce paper on accuracy of cetacean group size estimation (with Perryman)		
8L1C4V51	M		Produce paper on abundance of Hawaiian monk seals (with Bill Gilmartin and Thea Johanos)		Sep.
8L1C4V51	A		Conduct analysis of coastal ETP dolphin populations		
8L1C4V51	A		Produce estimates of abundance from early ETP surveys		

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S520	CYOP TITLE:	POPULATION & STOCK IDENTIFICATION	
TASK#:	8L1A5V52	TASK TITLE:	POPULATION IDENTITY	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
CHIVERS	SUSAN	J	12 5	1	GS 13-2, .5 FTE
DIZON	ANDREW	E	14 0	1	
ROBERTSON	KELLY	M	9 3	1	
TAYLOR	BARBARA	L	13 2	1	GS14-1, .5 FTE
TOTAL LABOR (\$K) (1100):					235.9
TOTAL PREMIUM PAY (1150):					0.0
TOTAL EC (1210):					49.5
TOTAL COLA (1213)					0.0
TOTAL AWARDS (1159)					0.0
TOTAL TRAINING (25XX)					0.8
TOTAL TASK (\$K):					286.2

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

3520	Lab/Div: SWFSC/MMD	CYOP Title: POPULATION IDENTITY PROGRAM
Prepared: NOV. 1997	Current Year Task #: 8L1A5V52	Task Title: POPULATION IDENTITY PROGRAM
Order: DIZON	Prior Year Task #: 8L1A5V52	

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">TRAVEL</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td>Domestic:</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td>Foreign:</td><td>5.0</td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td colspan="2">TOTAL TRAVEL = 5.0</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">TRANSPORTATION OF THINGS</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td colspan="2">TOTAL TRANSPORTATION =</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">RENTS, COMM., UTIL</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td colspan="2">TOTAL R-C-U =</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">COMPUTER</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td>Gov. Owned/Leased:</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td>Contracted:</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td colspan="2">TOTAL COMPUTER =</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">PRINTING</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td></td><td>1.0</td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td colspan="2">TOTAL PRINTING = 1.0</td></tr> </table>	TRAVEL	COSTS	Domestic:								Foreign:	5.0							TOTAL TRAVEL = 5.0		TRANSPORTATION OF THINGS	COSTS													TOTAL TRANSPORTATION =		RENTS, COMM., UTIL	COSTS											TOTAL R-C-U =		COMPUTER	COSTS	Gov. Owned/Leased:				Contracted:						TOTAL COMPUTER =		PRINTING	COSTS		1.0					TOTAL PRINTING = 1.0		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 45%;">25</th> <th style="width: 55%;">CONTRACTS</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td></td><td>Training:</td><td></td></tr> <tr><td></td><td>Contracts:</td><td>2.5</td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td colspan="3">TOTAL CONTRACTS = 2.5</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 45%;">26</th> <th style="width: 55%;">SUPPLIES (List major expenses)</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td></td><td>SUPPLIES FOR GENETICS LAB</td><td>20.0</td></tr> <tr><td></td><td>(chemicals, etc.) at approx 2.0K per month</td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td colspan="3">TOTAL SUPPLIES = 20.0</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 45%;">31</th> <th style="width: 55%;">EQUIPMENT (List major items)</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td></td><td></td><td>2.0</td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td colspan="3">TOTAL EQUIPMENT = 2.0</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 45%;">41</th> <th style="width: 55%;">GRANTS & CO-OP AGREEMENTS</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td colspan="3">TOTAL G & C-O =</td></tr> </table> <table style="width: 100%;"> <tr> <td style="width: 80%;">TOTAL OTHER OBJECTS</td> <td style="width: 20%;">\$30.5</td> </tr> </table>	25	CONTRACTS	COSTS		Training:			Contracts:	2.5																						TOTAL CONTRACTS = 2.5			26	SUPPLIES (List major expenses)	COSTS		SUPPLIES FOR GENETICS LAB	20.0		(chemicals, etc.) at approx 2.0K per month											TOTAL SUPPLIES = 20.0			31	EQUIPMENT (List major items)	COSTS			2.0																TOTAL EQUIPMENT = 2.0			41	GRANTS & CO-OP AGREEMENTS	COSTS													TOTAL G & C-O =			TOTAL OTHER OBJECTS	\$30.5
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S520
1

Lab/Div: Marine Mammal Division, La Jolla

Page:

CYOP Title: Population Identity Program

Leader: Dizon

Task Numbers 1st 8L1A5V52 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 316.7 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 285.4 K Other Objects: \$ 31.3 K Total: \$ 316.7 K

1. Major Fisheries Associated with CYOP

1. U.S. West Coast gillnet fisheries
2. ETP Yellowfin tuna purse seine fishery
3. Arctic artisanal fisheries
4. Various national and international scientific and illegal whale and dolphin fisheries

2. Fishery Management or Recovery Plans Associated with CYOP

1. Blue Whale Recovery Plan
2. Gray Whale Recovery Plan
3. North Pacific Right Whale Recovery plan
4. Bowheads Recovery Plan (currently being drafted)
5. Sperm Whale Recovery Plan
6. Humpback Whale Recovery Plan

NARRATIVE SECTION

3. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Information regarding stock structure of human-affected species is necessary for their management. Depletion or elimination of local populations could result from the combination of high local human-caused mortality with low intermixing of the affected population with surrounding populations. Defining management units to be small lessens this risk of local depletion but may result in an economic

burden to the fishing industry. Defining large management units has the opposite effect: low economic risks but high conservation ones. Our program integrates biological information with the conservation goals set down in the MMPA to provide results for management decisions about options and costs.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To use information from molecular genetics, distribution and abundance, life history, and morphology to make inferences about stock units.
2. To develop quantitative methods for integrating stock structure information and management-specified levels of risk.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

To define stocks, this program integrates data from a wide variety of sources and methodologies, such as distribution (from sighting surveys), mortality and abundance (from observer programs, surveys, etc.), and molecular genetics (from incidental take, biopsy, or salvage). These data form the basis for inferences regarding population structure and dispersal as well as for the risk analyses examining relative costs for making different decisions about how to sub-divide a species into management units.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

NOAA Strategic Plan

Assist status of protected species

Obtain information for status of stock reports for all marine mammals in the Pacific Region of U.S. waters and determine whether populations are significantly impacted by fisheries and other human activities

Implement recover/conservation plans

Participate on recovery teams and panels for protected species

Take a proactive approach/prevent listings

Monitor marine mammal populations to obtain accurate information which can be used to assess their status

MMPA and ESA

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Success is measured by the quality of the management unit advice provided to national (Status Review Groups, Take Reduction Teams, Recovery Plan Teams) and International (International Whaling Commission) conservation managers. Quality is measured by the relevance of the advice in terms of species (more points for strategic and endangered or threatened species) and the scientific merit of analyses that make up the advice. Scientific merit is difficult to judge although one measure is whether

the analyses are worthy of scientific publication. Another measure of success is the response of the Scientific Review Groups to the advice provided. Their responses are recorded in the meeting minutes.

6. Products/Services

Timely reports to the Scientific Review Groups and to the Scientific Advisors of the International Whaling Commission. Prompt publication of analyses when appropriate.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: The clients for these projects are by-and-large the Scientific Review Groups and the International Whaling Commission.

Suppliers:

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWC1/MMD 500,510, 530, 540; SWR; AFSC; NEFSC; SEFSC; ADF&G

Title: Population Identity

Leader: Dizon

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A5V52	A		Process and curate marine mammal biological specimens		
8L1A5V52	A		Do stock structure, phylogeny, and forensic ID studies on fishery impacted cetaceans to provide timely advice to the SRG and IWC.		
8L1A5V52	M		Publish "Molecular genetics of marine mammals" Special Publication #3, Society for marine Mammalogy		3d Qtr
8L1A5V52	M		Submit "Discrimination of two forms of blue whales in the southern Pacific Ocean" for 1997 IWC Scientific Committee Meeting		1st Qtr
8L1A5V52	M		Report to IWC on bowhead stock structure		May
8L1A5V52	M		Report to IWC on status of North Pacific sperm whales		May
8L1A5V52	M		Report to SRG (Honolulu Meeting) on sperm whale stock structure		Apr
8L1A5V52	M		Report to SRG (Seattle Meeting) on changing harbor porpoise stock boundaries		Sep

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S530	CYOP TITLE:	CETACEAN ECOLOGY	
TASK#:	8L1A6A53	TASK TITLE:	CETACEAN ECOLOGY	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
REILLY	STEPHEN	B	14 0	1	
PITMAN	ROBERT	L	11 2	1	
FIEDLER	PAUL	C	13 0	1	
HOLLAND	ROBERT	C	11 4	1	
PHILBRICK	VALERIE	A	9 5	1	

TOTAL LABOR (\$K) (1100):	267.0
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	56.1
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	1.0
TOTAL TASK (\$K):	324.1

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

0530	Lab/Div: SWFSC/MMD	CYOP Title: CETACEAN ECOLOGY PROGRAM
Prepared: NOV. 1997	Current Year Task #: 8L1A6A53	Task Title: CETACEAN ECOLOGY PROGRAM
Prepared by: REILLY	Prior Year Task #: 8L1A6A53	

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">TRAVEL</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td>Domestic:</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td>Foreign:</td><td>5.4</td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td colspan="2">TOTAL TRAVEL = 5.4</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">TRANSPORTATION OF THINGS</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td colspan="2">TOTAL TRANSPORTATION =</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">RENTS, COMM., UTIL</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td colspan="2">TOTAL R-C-U =</td></tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 60%;">COMPUTER</th> <th style="width: 40%;">COSTS</th> </tr> <tr><td>Gov. 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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC -S530

Lab/Div: Marine Mammal Division, La Jolla

Page: 1

CYOP Title: Cetacean Ecology Program

Leader: Reilly

Task Numbers 1st 8L1A6A53 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 342.3 K \$ _____ K \$ _____ K \$ _____
K

CYOP Budget Totals:

Personnel: \$ 323.1 K Other Objects: \$ 19.2 K Total: \$ 342.3 K

1. Major Fisheries Associated with CYOP

1. ETP yellowfin tuna fishery
2. Various California coastal fisheries
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. Blue Whale Recovery Plan
- 2.
- 3.
- 4.
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This program addresses the scientific and management aspects of physical and biological habitat use by marine mammals and endangered species. This program has examined feeding habitat of blue and sei whales in near-shore Southern California waters in order to determine which areas are important to their recovery. This program will collect and analyze data pertaining to the physical and biological habitat use of dolphins in the eastern tropical Pacific in the next three fiscal years as part of a major research effort to assess the impact of the yellowfin tuna purse seine fishery on dolphin populations in the ETP.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Amounts of variance in cetacean abundance and trend estimates "explained" by habitat studies.

6. Products/Services

Our results are used in combination with those from the other SWFSC/MMD programs to determine the abundance (and when possible) trends in marine mammal and endangered species populations within the geographic purview of the Center.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: Our clients include the Southwest Regional office of NMFS, the Office of Protected Resources, the International Whaling Commission, the US Marine Mammal Commission. All require informed advice on status and trends of populations to make management decisions.

Suppliers: Our 'suppliers' include the other programs of the Marine Mammal Division for abundance estimates and related data, the NOS for ship time, NESDIS (on occasion) for information from oceanographic data bases.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWC1/MMD 500, 510, 540; SWC1/AERG; NOS; NESDIS.

CYOP Number: SWC - S530

Lab/Div: SWC/MMD

Page: 1

Title: Ecology Program

Leader: Reilly

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A6A53	A		Collect environmental data on "new MOPS" cruises	Jun.	Sep.
8L1A6A53	M		Present results of habitat studies at marine mammal biology conference	Jan.	
8L1A6A53	M		Submit manuscript for publication for marine mammal biology conference	Jun.	

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S540	CYOP TITLE:	COASTAL MARINE MAMMAL ASSESSMENTS		
TASK#:	8L1A5V54	TASK TITLE:	COASTAL MARINE MAMMALS	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
BARLOW	JAY	P	14	0	1	
CARRETTA	JAMES	V	9	4	1	
FORNEY	KARIN	A	11	5	1	GS12-2, .5 FTE
LOWRY	MARK	S	11	7	1	QSI

TOTAL LABOR (\$K) (1100):	212.3
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	44.6
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.8
TOTAL TASK (\$K):	257.7

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

OF 540	Lab/Div: SWFSC/MMD	CYOP Title: COASTAL MARINE MAMMAL PROGRAM
Prepared: NOV. 1997	Current Year Task #: 8L1A5V54	Task Title: COASTAL MARINE MAMMAL PROGRAM
Order: BARLOW	Prior Year Task #: 8L1A5V54	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	5.0
Foreign:	5.0			
TOTAL TRAVEL =				5.0

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		5.0
		26	SUPPLIES (List major expenses)	COSTS
				3.2
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	3.2

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
				2.0
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		2.0
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =				

PRINTING	COSTS	TOTAL G & C-O =		
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$15.2
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S540 **Lab/Div:** Marine Mammal Division, La Jolla **Page:** 1

CYOP Title: Coastal Marine Mammal Program

Leader: Barlow

Task Numbers 1st 8L1A5V54 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 272.9 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 256.9 K Other Objects: \$ 16.0 K Total: \$ 272.9 K

1. Major Fisheries Associated with CYOP

1. California/Oregon swordfish and shark driftnet fishery
2. California coastal set net fishery
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. Humpback Whale Recovery Plan
2. North Pacific Right Whale Recovery Plan
3. Sperm Whale Recovery Plan
4. Blue Whale Recovery Plan
5. Fin Whale Recovery Plan
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This task investigates changes in coastal marine mammal populations associated with human activities (e.g., commercial fisheries, recovery from commercial whaling, research, etc). This task provides information so that the status of stocks of certain species can be determined, allowing NMFS to fulfill its requirements under the MMPA and ESA.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To monitor marine mammal populations.
2. To monitor the effect of fishery and other human caused mortality on marine mammal populations.
3. To develop methods of determining the status of marine mammal stocks.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Data from ship surveys will be used to estimate the abundance of dolphins, porpoise, and whales in waters off California, Oregon and Washington. Newly developed methods will be used to acoustically detect deep diving whales to improve abundance estimates. Aerial photographic surveys will be used to monitor the abundance of California sea lions and elephant seals. Aerial surveys will be used to continue monitoring the central and northern California harbor porpoise populations. Photo-identification studies will be continued for blue, humpback, and killer whales. Estimates of marine mammal mortality will be made based on NMFS observer program data and CDFG fishing effort estimates for California gillnet fisheries.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

NOAA Strategic Plan

Reducing bycatch

Research on bycatch by coastal gillnets, high seas driftnet, and tuna purse seines

Assist status of protected species

Obtain information for status of stock reports for all marine mammals in the Pacific Region of U.S. waters

Reduce marine mammal-fishery interactions

Obtain estimates of mortality for observed fisheries

Implement recover/conservation plans

Participate on recovery teams and panels for protected species

Take a proactive approach/prevent listings

Monitor marine mammal populations to obtain accurate information which can be used to assess their status

MMPA and ESA

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Information needed to revise Pacific Region Stock Assessment Reports should be available in a timely manner to keep all up-to-date.

Information needed to evaluate proposals to downlist/de-list ESA species should be anticipated and

available prior to any petitions to change ESA status.

6. Products/Services

The information produced by the program will primarily be used by NMFS management to 1) develop actions to protect marine mammals in California from unnecessary or excessive fishery mortality, 2) determine allowable takes for display, research and fisheries, 3) evaluate the effects of incidental take on marine mammals, and 4) to develop recovery plans for endangered whales. This task is responsible for compiling stock assessment reports for all marine mammal stocks inhabiting the waters of the Pacific Region.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: Products provided by this program are used by NMFS offices, Take Reduction Teams and Scientific Review Groups which are responsible for controlling and/or making recommendations on the taking of marine mammals.

Suppliers

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWC1/MMD 500, 520, 530, 550; F/PR; NMML; CDF&G

CYOP Number: SWC - S540

Lab/Div: SWC/MMD

Page: 1

Title: Coastal Marine Mammals

Leader: Jay Barlow

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A5V54	A		Conduct ship survey to estimate the abundance of all cetaceans in California waters (every 4 yrs)		
8L1A5V54	A		Elephant seal aerial photographic census and ground counts (Biennial)	Jan	Jun
8L1A5V54	A		California sea lion aerial photographic census and ground counts	Jul.	Oct.
8L1A5V54	A		Continue mark-recapture estimation for blue and humpback whales off California from CAMMS data and other photo-ID work.		
8L1A5V54	M		Review status of all marine mammals in U.S. EEZ waters of Southwest Region, and if appropriate, revise status of stocks report.		
8L1A5V54	M		Report on incidental mortality of marine mammals in the California gillnet fisheries		May
8L1A5V54	A		Assist Scientific Review Groups established under MMPA (1995-1997)		

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S550	CYOP TITLE:	DOLPHIN-SAFE RESEARCH		
TASK#:	8L1ADTPA	TASK TITLE:	DOLPHIN-SAFE RESEARCH		
		DATE:	09-Feb-98		

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
EDWARDS	ELIZABETH	F	14 4	1	
OLIVER	CHARLES	W	12 10	1	
SISSON	JOYCE	E	9 4	0.7	

TOTAL LABOR (\$K) (1100):	158.7
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	33.3
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.9
TOTAL TRAINING (25XX)	0.5
TOTAL TASK (\$K):	193.4

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

550	Lab/Div: SWFSC/MMD	CYOP Title: DOLPHIN SAFE TECHNOLOGIES PROGRAM
Prepared: NOV. 1997	Current Year Task #: 8L1ADTPA	Task Title: DOLPHIN SAFE TECHNOLOGIES PROGRAM
Prepared by: EDWARDS	Prior Year Task #: 8L1ADTPA	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	5.0		Training:	
			Contracts:	60.0
Foreign:				
TOTAL TRAVEL =				
	5.0		TOTAL CONTRACTS = 6.0	

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
				5.0
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 5.0	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
				5.0
TOTAL R-C-U =			TOTAL EQUIPMENT = 5.0	

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS			
	3.0			
TOTAL PRINTING =		TOTAL OTHER OBJECTS \$78.0		
	3.0			

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - S550 **Lab/Div:** Marine Mammal Division, La Jolla **Page:** 1

CYOP Title: Dolphin Safe Technologies Program

Leader: Edwards

Task Numbers 1st 8L1ADTPA 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 271.4 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 192.9 K Other Objects: \$ 78.5 K Total: \$ 271.4 K

1. Major Fisheries Associated with CYOP

1. ETP yellowfin tuna purse seine fishery
- 2.
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. International Dolphin Conservation Program
- 2.
- 3.
- 4.
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This task is responsible for investigating and developing methods for detecting and capturing large yellowfin tuna in the ETP without encircling dolphins and to bring about the reduction and eventual elimination of fishery-related dolphin mortality in the ETP.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To develop alternative fishing methods for catch large yellowfin tuna without encircling dolphin.
2. To investigate methods for locating large yellowfin tuna not associated with dolphin.
3. To investigate possible adverse effects on marine mammals, of dolphin-safe detection or capture methods.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

During FY98, projects not yet completed from previous years will be continued and new projects will be initiated, based on results of the 2nd Dolphin-Safe Research Planning Workshop completed March 1994. Dolphin-Safe Research during FY98 will have three major foci: 1) evaluation of results from contract work completed during FY97 to determine the optimal detection method for locating yellowfin tuna not associated with dolphins in the ETP, 2) planning of a research survey to determine abundance of large yellowfin in relation to dolphin distribution, and 3) investigation of potential detrimental effects of detection technologies on dolphins in the ETP, specifically acoustic pollution from acoustic fish detection devices and eye damage from laser detection devices.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

The International Dolphin Conservation Act of 1992 amended the General Permit authorized to the American Tunaboat Association which regulates the take of dolphin during fishing activities under the Marine Mammal Protection Act. It also placed new restrictions on the sale of tuna in the U.S. As of 1 June 1994, it is unlawful to sell, purchase, or offer for sale, transport, or ship any tuna or tuna product that is not dolphin-safe (tuna caught without encircling dolphin). The National Oceanic and Atmospheric Administration Authorization Act authorized funding to develop dolphin safe methods which is consistent with the NOAA Plan to reduce marine mammal/fishery interactions.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Number of fishery-related dolphin mortalities occurring annually in the ETP.

6. Products/Services

Peer-reviewed scientific papers, reports, workshop reports, and contract reports.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: Products are provided to the SWR, F/PR, DoS, tuna industry, environmental community, and IATTC.

Suppliers:

8. **Important Linkages** (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWC1/MMD CYOP 500, 510, 520, 530, F/PR, DoS

Title: Dolphin Safe Technologies Research

Leader: Edwards

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

[illegible]

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S560	CYOP TITLE:	MARINE MAMMAL PHOTOGRAMMETRY	
TASK#:	8L1A5V51	TASK TITLE:	PHOTOGRAMMETRY	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
PERRYMAN	WAYNE	L	13	3	1	
GILPATRICK	JAMES	W	11	4	1	
LYNN	MORGAN	S	9	5	1	

TOTAL LABOR (\$K) (1100):	141.1
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	29.6
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.6
TOTAL TASK (\$K):	171.3

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

560	Lab/Div: SWFSC/MMD	CYOP Title: Photogrammetry Program
Prepared: NOV. 1997	Current Year Task #: 8L1A5V51	Task Title: Photogrammetry Program
Order: Perryman	Prior Year Task #: 8L1A5V51	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	2.0		Training:	
			Contracts:	7.0
Foreign:	4.0			
TOTAL TRAVEL =				6.0

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		7.0
	0.5	26	SUPPLIES (List major expenses)	COSTS
				5.5
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	5.5

RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS			
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$ 19.0
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 560

Lab/Div: Marine Mammal Division, La Jolla

Page: 1

CYOP Title: Photogrammetry Program

Leader: Perryman

Task Numbers 1st 8L1A5V51 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 190.3 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 170.7 K Other Objects: \$ 19.6 K Total: \$ 190.3 K

1. Major Fisheries Associated with CYOP

1. California and other West Coast Coastal Gillnet Fisheries
2. Yellowfin tuna purse seine fishery in the ETP
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. Gray Whale Recovery Plan
2. Sperm Whale Recovery Plan
3. Steller Sea Lion Recovery Plan
4. North Pacific Right Whale Recovery Plan
5. Blue Whale Recovery Plan
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Management of marine mammal populations that are impacted by human activities requires information regarding population size and stock structure. This program provides counts of cetaceans and pinnipeds for stock assessments and morphometric information for species identification and stock structure analyses. These data provide the basis for assessments of pinnipeds and cetaceans along the West Coast and farther offshore.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To provide support for the Coastal Marine Mammal Program by obtaining aerial photographs of cetaceans and pinnipeds for assessment, abundance estimation, and calibration of observer estimates.
2. To develop photogrammetric methods for determination of stock discreteness of large and small cetaceans.
3. To collect and examine morphometric information on blue whales from the California Channel Islands for stock identification and examination of reproductive parameters.
4. Continue to examine the application of classified military assets to marine mammal research requirement.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

This program is designed to provide data (counts, measurements) from remote systems (cameras, thermal sensors, classified sources) for use in population assessments and stock determinations for pinnipeds and for large and small cetaceans. This program collects aerial photographs used to monitor population sizes for pinnipeds that breed on the California Channel Islands. Vertical aerial photographs are used to calibrate school size estimate for cetacean surveys and morphometric measurements from these images are used for stock determinations. Vertical images are also used to identify individual large cetaceans for population size estimation, determination of reproductive and growth parameters. This program measures day/night migration rates for California gray whales using thermal sensors to provide correction factors for population estimates derived from visual surveys. This program also conducts an annual shore-based census of northbound gray whale cow/calf pairs to produce and index of calf production. In addition, this program examines classified military technologies for application to marine mammal research.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

NOAA Strategic Plan

Obtain information for status of stock reports for all marine mammals in the Pacific Region of U.S. waters and determine whether populations are significantly impacted by fisheries and other human activities

Reduce marine mammal-fishery interactions

Obtain estimates of mortality for observed fisheries

Implement recover/conservation plans

Participate on recovery teams and panels for protected species

Take a proactive approach/prevent listings

Monitor marine mammal populations to obtain accurate information which can be used to assess their status

Expand ecosystem monitoring

Obtain habitat information for marine mammals
MMPA and ESA

6. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Pinniped population abundance tracked annually.
Dolphin observer estimates of group size calibrated.

5. Products/Services

Provide information used in management decisions regarding implementation of the MMPA and various ESA Recovery Plans such as:

- 1) Provide accurate and precise counts of pup production for Steller sea lion assessments and provide images for counts of California sea lions and northern elephant seals.
- 2) Provide counts of dolphins in schools for calibration of observers.
- 3) Provide measurements of cetaceans for stock identification.

Written and oral reports of population size and stock structure are submitted to scientific journals and presented at scientific meetings.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: The program's products are used by other programs within the Division, by other Centers, as well as international and national management groups, such as the International Whaling Commission, Endangered and Threatened Species Recovery Teams, Status Review Groups, Take Reduction Teams).

Suppliers:

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWC1/MMD 500, 510, 520, 530, 540, SWC1, NMML, ADF&G

CYOP Number: SWC - S560

Lab/Div: SWC/MMD

Page: 1

Title: Photogrammetry

Leader: Perryman

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A5V51	A		Provide support for the Coastal Marine Mammal Program surveys and census		
8L1A5V51	E		Investigate northeast Pacific blue whale population biology using photogrammetric techniques	Jun.	Sep.
8L1A5V51	E		Participate in NMML investigation of southbound migration of California gray whales	Jan	Mar
8L1A5V51	A		Investigate geographic stock structure in eastern Pacific dolphin populations		

Antarctic Ecosystem Research Group

(OTHER OBJECTS EXPENSES)

OMB 60	Lab/Div: AERG	CYOP Title: AMLR Vessel Support
Prepared: 12/2/97	Current Year Task #: 8L1A5H60	Task Title: AMLR Vessel Support
Order: R. Hewitt	Prior Year Task #: 8L1A5H60	

25	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:			Training:	
				Contracts: F T Support	40.0
				Fuel	202.4
				Jackie Popp	13.2
	Foreign:			Charter	1573.6
				Agent fees	20.0
	TOTAL TRAVEL =	0.0			

26	TRANSPORTATION OF THINGS	COSTS		TOTAL CONTRACTS =	1849.2
	Shipping of Cruise Equipment/Supplies	30.0	26	SUPPLIES (List major expenses)	COSTS
				Cruise supplies	62.8
	TOTAL TRANSPORTATION =	30.0		TOTAL SUPPLIES =	62.8

31	RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
	Satellite Fees	10.0			
	TOTAL R-C-U =	10.0			

41	COMPUTER	COSTS		TOTAL EQUIPMENT =	0.0
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
	TOTAL COMPUTER =	0.0			

	PRINTING	COSTS		TOTAL G & C-O =	0.0
	TOTAL PRINTING =	0.0			

TOTAL OTHER OBJECTS		\$1952.0
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC -160

Lab/Div: AERG

Page: 1

CYOP Title: AMLR Vessel Support

Leader: R. Hewitt

Task Numbers 1st 8L1A5H60 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 1952.0 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 0.0 K Other Objects: \$ 1952.0 K Total: \$ 1952.0 K

1. Major Fisheries Associated with CYOP

1. Krill Fishery
2. Patagonian Toothfish Longline Fishery
3. Patagonian Toothfish Trawl Fishery
4. Squid Jig Fishery
5. Icefish Trawl Fishery

2. Fishery Management or Recovery Plans Associated with CYOP

1. Antarctic Treaty
2. CCAMLR Regulatory Statutes
3. Domestic Fishing Regulations

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

The U.S. Antarctic Marine Living Resources (AMLR) program provides information needed to formulate U.S. policy on conservation and international management of resources living in the oceans surrounding Antarctica. The program was established by Public Law 98-623 to provide advice to the U.S. delegation to the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR), part of the Antarctic Treaty System. The AMLR program is managed by the Antarctic Ecosystem Research Group located at the Southwest Fisheries Science Center.

4. Objectives (What are the major objectives being pursued by this CYOP?)

To restore depleted finfish populations and maintain other finfish, krill and crab populations at sustainable levels in accord with CCAMLR principles and regulations.

5. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

This CYOP will provide the means to charter the research vessel, agent fees, fuel costs, and major equipment needed to conduct research in Antarctic waters during the 1998 season.

6. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

The U.S. AMLR program is a directed research program designed to complement the U.S. Antarctic Program (USAP) of basic research managed by the National Science Foundation (NSF), with the goal of maximizing the productivity of the overall U.S. science effort in Antarctica through close coordination in planning and cooperative work between the two programs. The Antarctic Marine Living Resources Convention Act, P.L. 98-623, Title III, was signed into law in 1984, implementing the Convention. Congress found that both directed and basic research programs concerning the marine living resources of Antarctica are essential to achieving the U.S. goal of effective implementation of the Convention. Section 312 (B) of the act states that:

"The Secretary of Commerce, in consultation with the Director of the NSF, the Secretary of State and the heads of other appropriate Federal agencies, shall design and conduct a program of directed scientific research coordinated with the U.S. Antarctic Program."

7. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Success of this project is evidenced by the completion of all field research objectives, and the safe passage of all embarked personnel.

8. Products/Services

Charter of a research ship for 103 days to conduct research activities and procurement of a commercial trawl fishing net.

9. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Information provided by the task will be used by the State Department to formulate U.S. positions on Antarctic resource conservation, by the U.S. AMLR program to adjust its long-range research strategy, by the CCAMLR Scientific Committee, and by other governments and researchers working in the Antarctic.

4. **Important Linkages** (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Department of State, National Science Foundation, Marine Mammal Commission, various non-government organizations interested in Antarctic conservation issues, commercial fishing industry, academic investigators at several universities receiving funding from U.S. AMLR program.

Page: 1

Leader: R. Hewitt

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

[illegible]

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S601	CYOP TITLE:	ANTARCTIC ECOSYSTEM RESEARCH		
TASK#:	8L1A6H60	TASK TITLE:	ECOSYSTEM MONITORING	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
HOLT	RENNIE	S	15 0	1	QSI
MARTIN	JANE	E	9 4	1	

TOTAL LABOR (\$K) (1100):	130.2
TOTAL PREMIUM PAY (1150):	2.0
TOTAL EC (1210):	27.3
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.4
TOTAL TASK (\$K):	159.9

0601		Lab/Div: AERG		CYOP Title: Antarctic Ecosystem Research	
eared: 12/2/97		Current Year Task #:8L1A6H60		Task Title:Ecosystem Monitoring	
kder:R. Holt		Prior Year Task #::8L1A6H60			
21		TRAVEL		COSTS	
Domestic:		5.5			
Foreign: GLOBEC		5.0			
WG-EMM		24.0			
1998 CCAMLR		24.0			
TOTAL TRAVEL =		58.5			
22		TRANSPORTATION OF THINGS		COSTS	
TOTAL TRANSPORTATION =		0.0			
23		RENTS, COMM., UTIL		COSTS	
TOTAL R-C-U =		0.0			
24		COMPUTER		COSTS	
Gov. Owned/Leased:					
Contracted:					
TOTAL COMPUTER =		0.0			
25		PRINTING		COSTS	
TOTAL PRINTING =		0.0			
26		CONTRACTS		COSTS	
Training:					
Contracts:					
TOTAL CONTRACTS =		0.0			
27		SUPPLIES (List major expenses)		COSTS	
TOTAL SUPPLIES =		0.0			
28		EQUIPMENT (List major items)		COSTS	
TOTAL EQUIPMENT =		0.0			
29		GRANTS & CO-OP AGREEMENTS		COSTS	
TOTAL G & C-O =		0.0			
30		TOTAL OTHER OBJECTS		\$58.5	

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S601	CYOP TITLE:	ANTARCTIC ECOSYSTEM RESEARCH		
TASK#:	8L1A6H61	TASK TITLE:	ANTARCTIC KRILL STOCK ASSESSMENT	DATE:	09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
DEMER	DAVID	A	13	3	1	
HEWITT	ROGER	P	14	0	1	
ARMSTRONG	WESLEY	A	9	3	1	

TOTAL LABOR (\$K) (1100):	174.7
TOTAL PREMIUM PAY (1150):	10.0
TOTAL EC (1210):	36.7
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	2.2
TOTAL TRAINING (25XX)	0.6
TOTAL TASK (\$K):	224.2

(OTHER OBJECTS EXPENSES)

1	Lab/Div: AERG	CYOP Title: Antarctic Ecosystem Research
Awarded: 12/2/97		Current Year Task #: 8L1A6H61
Awarded By: R. Hewitt		Task Title: Antarctic Krill Stock Assessment
Prior Year Task #: 8L1A6H61		

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic: Conferences	10.0		Training:	
			Contracts:	
Foreign: WG-EMM	12.0			
TOTAL TRAVEL =				
		TOTAL CONTRACTS = 0.0		

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
			Misc. Supplies	20.0
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 20.0	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =			TOTAL EQUIPMENT = 0.0	

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O = 0.0	

PRINTING	COSTS			
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$42.0
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S601	CYOP TITLE:	ANTARCTIC ECOSYSTEM RESEARCH		
TASK#:	8L1A6H62	TASK TITLE:	FISH/KRILL POP DYNAMICS	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
JONES (VICE WATTERS)	CHRISTOPHER	D	12 1	0.75	
SEXTON	STEPHANIE		11 6	1	

TOTAL LABOR (\$K) (1100):	81.8
TOTAL PREMIUM PAY (1150):	3.0
TOTAL EC (1210):	17.2
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.4
TOTAL TASK (\$K):	102.4

(OTHER OBJECTS EXPENSES)

601	Lab/Div: AERG	CYOP Title: Antarctic Ecosystem Research	
Prepared: 12/2/97	Current Year Task #:8L1A6H62	Task Title: Fish/Krill Pop Dynamics	
Order: R. Holt	Prior Year Task #:8L1A6H62		

TRAVEL		COSTS	25	CONTRACTS	COSTS
Domestic:				Training:	
				Contracts: Suni Wilhelm	7.2
Foreign:					
TOTAL TRAVEL =		0.0			
TRANSPORTATION OF THINGS		COSTS	TOTAL CONTRACTS = 7.2		
			26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =		0.0	TOTAL SUPPLIES = 0.0		
RENTS, COMM., UTIL			31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =		0.0			
COMPUTER		COSTS	TOTAL EQUIPMENT = 0.0		
Gov. Owned/Leased:			41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:					
TOTAL COMPUTER =		0.0	TOTAL G & C-O = 0.0		
PRINTING		COSTS			
TOTAL PRINTING =		0.0			

TOTAL OTHER OBJECTS		\$7.2
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(OTHER OBJECTS EXPENSES)

01	Lab/Div: AERG	CYOP Title: Antarctic Ecosystem Research	
Entered: 12/2/97	Current Year Task #: 8L1A6H63	Task Title Field Operations	
Entered: R. Hewitt	Prior Year Task #: 8L1A6H63		

TRAVEL		COSTS	25	CONTRACTS		COSTS
Domestic:				Training:		
				Contracts: UCSD-SIO	77.5	
				University of Texas at Austin	71.1	
				San Jose State	76.8	
Foreign:						
Ship Travel (13 X 5.0)		65.0				
TOTAL TRAVEL =		65.0		TOTAL CONTRACTS =		225.4

TRANSPORTATION OF THINGS		COSTS	26	SUPPLIES (List major expenses)		COSTS	
				Cruise Supplies	15.0		
TOTAL TRANSPORTATION =		0.0		TOTAL SUPPLIES =		15.0	

RENTS, COMM., UTIL		COSTS	31	EQUIPMENT (List major items)		COSTS	
TOTAL R-C-U =		0.0		TOTAL EQUIPMENT =		0.0	

COMPUTER		COSTS	41	GRANTS & CO-OP AGREEMENTS		COSTS	
Gov. Owned/Leased:							
Contracted:							
TOTAL COMPUTER =		0.0		TOTAL G & C-O =		0.0	

PRINTING		COSTS
TOTAL PRINTING =		0.0

TOTAL OTHER OBJECTS		\$305.4
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**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S601	CYOP TITLE:	ANTARCTIC ECOSYSTEM RESEARCH		
TASK#:	8L1A6H64	TASK TITLE:	PREDATOR MONITORING	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
TRIVELPIECE	WAYNE	E	13 4	1	

TOTAL LABOR (\$K) (1100):	61.5
TOTAL PREMIUM PAY (1150):	5.0
TOTAL EC (1210):	12.9
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	79.6

(OTHER OBJECTS EXPENSES)

601	Lab/Div: AERG	CYOP Title: Antarctic Ecosystem Research	
Prepared: 12/2/97	Current Year Task #: 8L1A6H64	Task Title: Predator Monitoring	
Prepared by: R. Holt	Prior Year Task #: 8L1A6H64		

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts: Palmer bird work	40.0
			Costa and Goebel	54.0
			Thorson	3.0
Foreign: Camp Travel (7 X 5.0)	35.0		Carten	7.0
			Satellite Comms.	12.0
TOTAL TRAVEL =				
35.0				

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
			Prey research supplies	6.9
TOTAL TRANSPORTATION =				
0.0				

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				
0.0				

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =				
0.0				

PRINTING	COSTS	TOTAL G & C-O =	
		0.0	
TOTAL PRINTING =			
0.0			

TOTAL OTHER OBJECTS		\$157.9
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 601

Lab/Div: AERG

Page: 1

CYOP Title: Antarctic Ecosystem Research

Leader: R. Holt

Task Numbers 1st 8L1A6H60 2nd 8L1A6H61 3rd 8L1A6H62 4th 8L1A6H63
5th 8L1A6H64

Task Budget Totals \$ 218.4 K \$ 266.2 K \$ 109.6 K \$ 305.4 K \$ 237.5 K

CYOP Budget Totals:

Personnel: \$ 564.5 K Other Objects: \$ 572.6 K Total: \$ 1137.1 K

1. Major Fisheries Associated with CYOP

1. Krill Fishery
2. Patagonian Toothfish Longline Fishery
3. Patagonian Toothfish Trawl Fishery
4. Squid Jig Fishery
5. Icefish Trawl Fishery

2. Fishery Management or Recovery Plans Associated with CYOP

1. Antarctic Treaty
2. CCAMLR Regulatory Statutes
3. Domestic Fishing Regulations

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)
The U.S. Antarctic Marine Living Resources (AMLR) program provides information needed to formulate U.S. policy on conservation and international management of resources living in the oceans surrounding Antarctica. The program was established by Public Law 98-623 to provide advice to the U.S. delegation to the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR), part of the Antarctic Treaty System. The AMLR program is managed by the Antarctic Ecosystem Research Group located at the Southwest Fisheries Science Center.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To restore depleted finfish populations and maintain other finfish, krill and crab populations at sustainable levels in accord with CCAMLR principles and regulations.
2. To prevent any harvested population from falling below the level that ensures the greatest net annual increment.
3. To maintain ecological relationships between harvested, dependent, and related populations of Antarctic marine living resources.
4. To restore depleted populations.
5. To prevent or minimize the risk of changes in the marine ecosystem that are not potentially reversible over two to three decades.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

The AMLR program will be divided into five tasks: (1) Ecosystem Monitoring will coordinate and review field research on krill predators, conduct AMLR Interagency Review Panel and pre-CCAMLR meetings, coordinate scientific presentations and participation at CCAMLR meetings, and update the Program Development Plan. (2) Antarctic Krill Stock Assessment will conduct acoustic surveys of krill, prepare working papers and manuscripts, and participate in CCAMLR Krill Working Group Meeting. (3) Fish/Krill Population Dynamics will review data and papers on the status of fish stocks submitted to CCAMLR, collect data and prepare analysis on Antarctic crab populations, and participate in CCAMLR Stock Assessment meeting. (4) Field Operations will design, coordinate and conduct prey/oceanographic activities undertaken during the field season in accordance with the long-range Antarctic research strategy. (5) Predator monitoring will design, coordinate and conduct predator (seal and penguins) and crab activities undertaken during the field season.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

The U.S. AMLR program is a directed research program designed to complement the U.S. Antarctic Program (USAP) of basic research managed by the National Science Foundation (NSF), with the goal of maximizing the productivity of the overall U.S. science effort in Antarctica through close coordination in planning and cooperative work between the two programs. The Antarctic Marine Living Resources Convention Act, P.L. 98-623, Title III, was signed into law in 1984, implementing the Convention. Congress found that both directed and basic research programs concerning the marine living resources of Antarctica are essential to achieving the U.S. goal of effective implementation of the Convention. Section 312 (B) of the act states that:

"The Secretary of Commerce, in consultation with the Director of the NSF, the Secretary of State and the heads of other appropriate Federal agencies, shall design and conduct a program of directed scientific research coordinated with the U.S. Antarctic Program."

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The success of this project is measured by the achievement of maintaining fishery stocks which provide a substantial yield and at the same time maintaining stocks of dependent and related species. One measure of success is that AMLR research is the cornerstone of CCAMLR's effort to manage the krill

fishery and its effects on seal and bird populations during their reproductive period. Another measure of success is that we design, implement, and report research studies which address scientific requirements of the U.S. Department of State in their efforts to ensure CCAMLR manages the living marine resources of Antarctic waters in a conservative manner. The success of this effort is supported by the strong support we have from the entire environmental community, the U.S. fishery, the NSF, and the MMC. In particular, the DOS has consistently been pleased with the AMLR efforts. Finally, our success is measured by the high degree of acceptance exhibited by the scientific community. Our investigators have been very successful in publishing manuscripts in peer-reviewed journals, including an article in the journal *Nature* during this last year.

5. Products/Services

Reports and technical papers are prepared to meet U.S. obligations to the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR). Scientific papers are prepared for publication. AERG staff and invited consultants will participate in CCAMLR working groups and other international meetings to address conservation issues and assess relevant scientific information.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Information provided by the tasks will be used by the State Department to formulate U.S. positions on Antarctic resource conservation, by the U.S. AMLR program to adjust its long-range research strategy, by the CCAMLR Scientific Committee, and by other governments and researchers working in the Antarctic.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

National Marine Mammal Lab (AKC), Department of State, National Science Foundation, Marine Mammal Commission, various non-government organizations interested in Antarctic conservation issues, commercial fishing industry, academic investigators at several universities receiving funding from U.S. AMLR program.

Title: Antarctic Ecosystem Research

Leader: R. Holt

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A6H60	E	1	Conduct pre-CCAMLR meetings.	5/98	9/98
8L1A6H60	A	2	Coordinate scientific presentations and participation at CCAMLR Working Groups, Scientific Committee, and Commission meetings.	10/97	7/98
8L1A6H60	A	3	Formulate US advice regarding long-term direction CCAMLR should pursue to manage Antarctic crab, squid, fish, and krill fisheries.	10/97	9/98
8L1A6H60	A	4	Coordinate predator/prey modeling studies, penguin research at Palmer Station, and predator monitoring studies at Seal Island and Cape Shirreff.	10/97	9/98
8L1A6H60	M	5	Plan and execute all arrangements and host CCAMLR's synoptic survey planning meeting, if required.	10/97	8/98
8L1A6H60	A	6	Plan, conduct, and participate in field season.	10/97	4/98
8L1A6H60	E	7	Participate in US GLOBEC program planning.	As	req'd

8L1A6H60	A	8	Manage AERG program budget, personnel, and research activities.	10/97	9/98
8L1A6H60	M	9	Review Program priorities, formulate long-term objectives, and complete Program Development Plan.	12/97	6/98
8L1A6H61	A	10	Design, coordinate and conduct 1997/98 field work; analyze acoustic data.	10/97	3/98
8L1A6H61	M	11	Write summaries of field research activities and results for AMLR Field Season Report and U.S. Antarctic Journal.	3/98	11/98
8L1A6H61	A	12	Investigate linkages between krill availability and predator performance.	10/97	9/98
8L1A6H61	E	13	Prepare working papers for CCAMLR meetings and participate in CCAMLR krill management meetings.	1/98	8/98
8L1A6H61	A	14	Enhance capabilities of SWFSC acoustic system.	10/97	9/98
8L1A6H61	A	15	Investigate methods for classification of acoustic targets.	10/97	9/98
8L1A6H61	A	16	Describe errors and biases associated with echo integration methodology.	10/97	9/98
8L1A6H61	M	17	Host CCAMLR meetings on Area 48 coordination.	5/98	9/98
8L1A6H61	A	18	Maintain in-house zooplankton sampling capability including procurement of equipment & supplies, staffing, at-sea sampling, and specimen archiving.	10/97	9/98
8L1A6H62	A	19	Review papers on status of fish stocks submitted to CCAMLR.	6/98	9/98
8L1A6H62	A	20	Formulate advice concerning US guidance to CCAMLR for management of Antarctic crab and fish stocks.	10/97	9/98
8L1A6H62	M	21	Attend and participate in CCAMLR Scientific Committee and Commission meetings and Working Group on Stock Assessment.		10/97
8L1A6H62	A	22	Investigate use of satellite imagery to describe ice-edge dynamics and climatology.	10/97	9/98

Honolulu Laboratory

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

7700	Lab/Div: Honolulu Laboratory	CYOP Title: Admin & Research Support - Honolulu
Prepared: 11/18/97	Current Year Task #: 8L1A1A75	Task Title: Kewalo Research Facility
Order: Dollar	Prior Year Task #: --	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
			Repairs	4,000
Foreign:				
TOTAL TRAVEL =				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 4,000		
		26	SUPPLIES (List major expenses)	COSTS
			Miscellaneous Supplies	3,000
TOTAL TRANSPORTATION =		TOTAL SUPPLIES = 3,000		

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
			Miscellaneous Equipment	3,000
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT = 3,000		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =				

PRINTING	COSTS	TOTAL G & C-O =		
		TOTAL OTHER OBJECTS 10,000		
TOTAL PRINTING =				

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

700	Lab/Div: Honolulu Laboratory	CYOP Title: Admin & Research Support - Honolulu
Prepared: 11/18/97	Current Year Task #: 8L1A7A71	Task Title: Administration Operation
Prepared by: Laurs	Prior Year Task #: 8L1A7A71	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =			TOTAL EQUIPMENT =	

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:			JIMAR	123,360
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O = 123,360	

PRINTING	COSTS	TOTAL OTHER OBJECTS 123,360		
TOTAL PRINTING =				

SOUTHWEST FISHERIES SCIENCE CENTER

CYOP FINANCIAL DATA

(PERSONNEL)

FY 1998

CYOP:	S700	CYOP TITLE:	ADMIN & RESEARCH SUPPORT - HONOLULU	
TASK#:	8L1C1A71	TASK TITLE:	COMPUTER AND LIBRARY SERVICES	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
YOSHIMOTO	RONALD	K	5 5	0.8	GS6-4, .8 FTE
ABBOTT	SANDRA	L	9 5	1	
HIGUCHI	WAYDE	S	11 4	1	
PAPPAS	JANET	L	11 3	0.8	
PRICE	RUSSELL	N	12 2	0.02	
TIEMAN	DONALD	R	12 7	1	
UYEDA	RICHARD	I	9 1	1	GS11-1, .7 FTE

TOTAL LABOR (\$K) (1100):	219.1
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	46.0
TOTAL COLA (1213)	49.3
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	1.2
TOTAL TASK (\$K):	315.6

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

6700		Lab/Div: Honolulu Laboratory		CYOP Title: Administration and Research Support - Honolulu	
Prepared: 11/18/97		Current Year Task #: 8L1C1A71		Task Title: Computer and Library Services	
Prepared by: Tieman		Prior Year Task #: 8L1C1A71			

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
Professional Meetings	2,500		Contracts:	
			Inter-Library Loan Cataloging	1,200
Foreign:				
TOTAL TRAVEL =				
		TOTAL CONTRACTS =		
				1,200

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
			Computer Supplies	30,000
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	
				30,000

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
			Computer Equipment	25,000
TOTAL R-C-U =			TOTAL EQUIPMENT =	
				25,000

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS			
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	58,700
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**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S700	CYOP TITLE:	ADMIN & RESEARCH SUPPORT - HONOLULU			
TASK#:	8L1C1CHL	TASK TITLE:	FISHERIES INFO. TECHNOLOGY - HONOLULU			DATE: 26-Jan-98
LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
PRICE	RUSSELL	N	12	2	0.98	
						TOTAL LABOR (\$K) (1100): 44.9
						TOTAL PREMIUM PAY (1150): 0.0
						TOTAL EC (1210): 9.4
						TOTAL COLA (1213) 10.1
						TOTAL AWARDS (1159) 0.0
						TOTAL TRAINING (25XX) 0.2
						TOTAL TASK (\$K): 64.6

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

#700	Lab/Div: Honolulu Laboratory	CYOP Title: Administration and Research Support - Honolulu
Prepared: 11/18/97	Current Year Task #: 8L1C1CHL	Task Title: NMFS IT Funding - Honolulu
Prepared by: Tieman	Prior Year Task #: 8L1C1C72	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS	TOTAL OTHER OBJECTS		
		-0-		
TOTAL PRINTING =				

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S700	CYOP TITLE:	ADMIN & RESEARCH SUPPORT - HONOLULU			
TASK#:	9WGN4070	TASK TITLE:	DIRECTOR'S OFFICE - HONOLULU			DATE: 26-Jan-98
LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
LAURS	R	M	15	7	1	QSI
ONOSAKI	LINDA	H	7	10	1	
TOTAL LABOR (\$K) (1100):						120.3
TOTAL PREMIUM PAY (1150):						0.0
TOTAL EC (1210):						25.3
TOTAL COLA (1213)						27.1
TOTAL AWARDS (1159)						11.2
TOTAL TRAINING (25XX)						0.4
TOTAL TASK (\$K):						184.3

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

700	Lab/Div: Honolulu Laboratory	CYOP Title: Admin & Research Support - Honolulu
pared: 11/18/97	Current Year Task #: 9WGN4070	Task Title: Director's Office
der: Laurs	Prior Year Task #: 9WGN4070	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	20,000		Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				20,000

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =			TOTAL EQUIPMENT =	

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS	TOTAL G & C-O =		
TOTAL PRINTING =		TOTAL OTHER OBJECTS		

20,000

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S700	CYOP TITLE:	ADMIN & RESEARCH SUPPORT - HONOLULU	
TASK#:	9WGN4071	TASK TITLE:	ADMINISTRATIVE SUPPORT - HONOLULU	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
WONG	GLORIA	J	6 5	1	
FIUST	FRANCINE	L	5 8	1	
YAMAGUCHI	DEBORAH	H	7 1	1	
WONG	SUSAN	S	7 10	1	
TAMANAH	JANE	S	7 10	1	
KAMEI	SUSAN	K	12 9	1	
KENDIG	JUDITH	L	9 1	1	

TOTAL LABOR (\$K) (1100):	239.0
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	50.2
TOTAL COLA (1213)	53.8
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	1.4
TOTAL TASK (\$K):	344.4

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

700	Lab/Div: Honolulu Laboratory	CYOP Title: Admin & Research Support - Honolulu
pared: 11/18/97	Current Year Task #: 9WGN4071	Task Title: Administrative Support
der: Kamei	Prior Year Task #: 9WGN4071	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	6,000		Training:	
			Contracts: VA Physicals	2,000
			Grounds/Building Maintenance	75,800
			Environmental Compliance	3,000
Foreign:			Translation	6,000
			Telephone System	80,000
			Cost Per Copy Program	13,000
TOTAL TRAVEL =				
	6,000			

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
Shipment of Supplies & Equipment	1,000		Office Supplies	23,200
FedEx	9,000		Books	1,000
GSA Vehicles	22,000		Library Periodicals	30,000
TOTAL TRANSPORTATION =				
	32,000			

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
Electricity/Water	111,000			6,000
Mail Services	12,000			
Telephone/Data Lines	71,000			
Kewalo Lease Rent	38,000			
TOTAL R-C-U =				
	232,000			

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =				

PRINTING	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
	3,000			
TOTAL PRINTING =				
	3,000			

TOTAL OTHER OBJECTS		513,000
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 700

Lab/Div: Honolulu Laboratory

Page: 1

CYOP Title: Admin & Research Support - Honolulu

Leader: R. Michael Laurs

Task Numbers 1st 9WGN4070 2nd 9WGN4071 3rd 8L1C1A71
 4th 8L1C1CHL 5th 8L1A1A75 6th 8L1A7A71
 7th 8L2ASM70

Task Budget Totals \$ 204.3 K \$ 857.4 K \$ 374.3 K
 \$ 65.0 K \$ 10.0 K \$ 123.4 K
 \$ 390.0 K

CYOP Budget Totals:

Personnel: \$ 906.1 K Other Objects: \$ 1118.3 K Total: \$ 2024.4 K

1. Major Fisheries Associated with CYOP

- ☐ Protected Species Investigations
- ☐ Building sustainable fisheries

2. Fishery Management or Recovery Plans Associated with CYOP

- ☐ Western Pacific Pelagics FMP
- ☐ Western Pacific Crustaceans FMP
- ☐ NWHI Bottomfish FMP

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Management of scientific laboratory, facilities, computer resources, and personnel.

2. Objectives (What are the major objectives being pursued by this CYOP?)

To stay within our budget allocations.

Maintain adequate facilities and provide computer support to conduct research in support of Laboratory's mission.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Sound fiscal, personnel and facilities management practices.

Expert computer resources support.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

It affects all functions of the Honolulu Laboratory and is essential to mission accomplishment.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Final year-end budget is within 1% of budget allocation

Positive feedback from clients/customers

Prompt delivery of services/supplies

6. Products/Services

Budget reports

Personnel advice and assistance

Facilities maintenance

Travel management

Procurement

Safety

Security

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Our clients are all employees of the Honolulu Laboratory.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Overlaps all CYOP's in Laboratory and includes collaboration with WASC, SWFSC staff, PAO staff, and other Federal agencies.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1998

CYOP Number: SWC - 700

Lab/Div: Honolulu Laboratory

Page: 1

Title: Admin & Research Support - Honolulu

Leader: R. Michael Laurs

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
9WGN4070	A	1	Direct and oversee Honolulu Laboratory's operation, including facilities.	10/97	9/98
	A	2	Provide guidance for overall scientific program of Honolulu Laboratory.	10/97	9/98
	A	3	Serve as focus for communication of Honolulu Laboratory scientific programs with outside agencies and the public.	10/97	9/98
	A	4	Allocate funding and personnel to achieve goals of NMFS and the Honolulu Laboratory.	10/97	9/98
	A	5	Serve as the chief scientist for the Ocean Color Program and the NOAA Coast Watch.	10/97	9/98
	A	6	Interact with WPRFMC and Joint Institute For Marine and Atmospheric Research to ensure continuity and development of programs.	10/97	9/98
	A	7	Complete actions as needed for new building construction.	10/97	9/98
	A	8	Expand team-building training.	10/97	9/98

9WGN4071	A	9	Provide overall management and administrative support in the areas of budget, contracting, and procurement for the Honolulu Laboratory.	10/97	9/98
	A	10	Provide overall facility management and administrative support for our mission.	10/97	9/98
8L1C1A71	A	1	Perform scientific publication functions.	10/97	9/98
8L1C1A71 8L1C1CHL	A	2	Operate, monitor, and maintain local area network equipment, software, and communications links.	10/97	9/98
	A	3	Design, program, test, install, maintain, and operate ITS systems.	10/97	9/98
	A	4	Provide computer and information systems training for users.	10/97	9/98
	A	5	Overall coordination and conversion of databases and development of information systems including ORACLE.	10/97	9/98
	A	6	Provide library and scientific reference service to research programs.	10/97	9/98
	A	7	Overall administration of library resources and day-to-day operations.	10/97	9/98
	A	8	Develop operational WWW website for Laboratory	10/97	9/98

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

E 5700	Lab/Div: Honolulu Laboratory	CYOP Title: Admin & Research Support - Honolulu
Prepared: 11/18/97	Current Year Task #: 8L2ASM70	Task Title: Swordfish Research
Reader: Laurs	Prior Year Task #: 8L2ASM70	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	10,000		Training:	
Longline Cruise (Boggs)	500		Contracts: Water Analysis (Seki)	4,000
			Seagoing Technician (Seki)	4,000
			Hydraulic Rep (Boggs)	2,000
Foreign:			Cold Storage (DeMartini)	2,000
			Histology (DeMartini)	1,000
			Electron Microscopy (DeMartini)	1,500
			Swordfish Sex Assay (DeMartini)	2,000
TOTAL TRAVEL =	10,500		TOTAL CONTRACTS =	16,500

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
Samples (Boggs)	250		98-05 Cruise Supplies (Seki)	3,000
Specimen Shipments (DeMartini)	500		Cruise Supplies (Seki)	3,600
			Lab/Longline Cruise Supplies (Boggs)	5,000
			Lab/Longline Cruise Supplies (DeMartini)	4,000
			Software (LaBelle)	2,000
TOTAL TRANSPORTATION =	750		TOTAL SUPPLIES =	17,600

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
ISC Meeting	10,000		Tracking Circuit Board (Boggs)	5,000
			CPU (Uchiyama)	1,500
			CPU (LaBelle)	3,000
TOTAL R-C-U =	10,000		TOTAL EQUIPMENT =	9,500

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:			JIMAR (DiNardo)	30,000
			JIMAR	290,150
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	320,150

PRINTING	COSTS			
Swordfish Proceedings	5,000			
TOTAL PRINTING =	5,000			

TOTAL OTHER OBJECTS	390,000
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 700

Lab/Div: Honolulu Laboratory

Page: 1

CYOP Title: Swordfish Research

Leader: R. Michael Laurs

Task Numbers 1st 8L2ASM70 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ _____ 390 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ _____ K Other Objects: \$ _____ 390 K Total: \$ _____ 390 K

1. Major Fisheries Associated with CYOP

1. Hawaii longline fishery for swordfish and tuna
2. Other domestic and foreign tuna and billfish fisheries in the central and western Pacific Ocean

2. Fishery Management or Recovery Plans Associated with CYOP

1. Western Pacific Pelagics FMP

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Management of domestic and international fisheries on swordfish in the central and western Pacific by the NMFS, the WPRFMC, and multinational organizations must be based on an understanding of swordfish distribution, movements, stock structure and population biology. Accurate and reliable population dynamics models for swordfish are required for stock assessments that will be the basis of multilateral management of high-seas fisheries and optimization of yields by domestic fisheries.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To investigate Pacific swordfish migration patterns
2. To investigate Pacific swordfish growth rates
3. To coordinate international research on Pacific swordfish through ISC

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Conduct tag and release project; use biological information on biological vital rates and related information to develop population simulation model for Pacific swordfish; plan, organize, and coordinated general meeting and swordfish working group of ISC.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Project is linked to NOAA Fisheries Strategic Plan element Build Sustained Fisheries; problem chosen because information that project will yield is required for the management of the Pacific swordfish resource which is the highest value species in the U.S. western Pacific longline fishery.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Success of the project will be measured by the number of swordfish tagged and released, the sensitivity and robustness of the population simulation model that is developed, and the holding of the ISC general and swordfish working group meetings.

6. Products/Services

Products will include information on Pacific swordfish migration patterns and growth rates; development of Pacific swordfish population model.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients are fishery scientists and managers, U.S. western Pacific longline fishing industry, and Department of State, Western Pacific Regional Fisheries Management Council, and NMFS SWR.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Project is coordinated with HL Stock Assessment, Fish Biology and Ecology, and Fishery Monitoring CYOPs.

Page: 1

Leader: R. Michael Laurs

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date/finish column. Use additional pages if required.)

[illegible]

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S701	CYOP TITLE:	FISHERIES MONITORING AND ECONOMICS	
TASK#:	8L1C2A74	TASK TITLE:	FISHERY MONITORING AND ECONOMICS	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
CABACUNGAN	FRANK	L	7	5	1	
DOWDELL	FREDERICK		7	2	1	
ITO	RUSSELL	Y	7	6	1	
KAWAMOTO	KURT	E	9	4	1	
POOLEY	SAMUEL	G	14	5	1	

TOTAL LABOR (\$K) (1100):	185.0
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	38.8
TOTAL COLA (1213)	41.6
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	1.0
TOTAL TASK (\$K):	266.4

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

6701	Lab/Div: Honolulu Laboratory	CYOP Title: Fisheries Monitoring and Economics
pared: 11/18/97	Current Year Task #: 8L1C2A74	Task Title: Fishery Monitoring and Economics
der: Pooley	Prior Year Task #: 8L1C2A74	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	6,500		Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				
6,500				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
				3,000
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 3,000	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
				4,000
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT = 4,000		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
			Economic Research	10,000
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O = 10,000	

PRINTING	COSTS			
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	23,500
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S701	CYOP TITLE:	FISHERIES MONITORING AND ECONOMICS	
TASK#:	8L1C2A76	TASK TITLE:	FISHERY DATA MANAGEMENT	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
TAGAMI	DARRYL	T	11	4	1	
MIYAMOTO	BRENT	M	9	1	0.6	
HAMM	DAVID	C	12	10	0.5	
TSUKANO	LUCILLE	T	7	8	1	

TOTAL LABOR (\$K) (1100):	118.1
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	24.8
TOTAL COLA (1213)	26.6
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.7
TOTAL TASK (\$K):	170.2

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

S701	Lab/Div: Honolulu Laboratory	CYOP Title: Fisheries Monitoring and Economics
Prepared: 11/18/97	Current Year Task #: 8L1C2A76	Task Title: Fishery Data Management
Reader: Hamm	Prior Year Task #: 8L1C2A76	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
			Software, miscellaneous supplies	2,000
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 2,000	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS	TOTAL OTHER OBJECTS		
		2,000		
TOTAL PRINTING =				

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC -701

Lab/Div: Honolulu Lab

Page: 1

CYOP Title: Fisheries Monitoring and Economics

Leader: Pooley

Task Numbers 1st 8L1C2A74 2nd 8L1C2A76 3rd _____ 4th _____

Task Budget Totals \$ 289.9 K \$ 172.2 K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 434.9 K Other Objects: \$ 27.2 K Total: \$ 462.1 K

1. Major Fisheries Associated with CYOP

1. NWHI lobster
2. NWHI bottomfish
3. Western Pacific domestic pelagics (tunas, swordfish, marlins, mahimahi, sharks)
4. Island bottomfish (MHI, American Samoa, Guam, Northern Mariana Islands)
5. Central Pacific distant-water pelagics (tunas)

2. Fishery Management or Recovery Plans Associated with CYOP

1. Western Pacific Crustaceans FMP
2. Western Pacific Bottomfish & Seamount Groundfish FMP
3. Western Pacific Pelagic Species FMP
4. Western Pacific Precious Corals FMP
5. Pacific Sea Turtle Recovery Plan

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

The Fishery Management & Performance Investigation (FMPI) is the focal point for collecting fishery-dependent information for Honolulu Laboratory fishery research programs and for the Western Pacific Regional Fishery Management Council (Council). It also handles data processing and data management for the Honolulu Laboratory as a whole (including non-fishery programs). And it conduct operations and

economic research on Federally-managed fisheries.

These activities provide scientific advice for fisheries management and recovery of protected species.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To compile and report fishery-dependent information on western Pacific fisheries.
2. To provide timely, high-quality data.
3. To provide fisheries management advice based on operational and economic analysis.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Collect, compile, and summarize fishery and market information through Federal logbooks, shoreside monitoring, and collaboration with island fisheries agencies.

Develop computer-based data quality control and summarization programs.

Participate in each Council plan team and prepare annual and quarterly reports on Federally-monitored fisheries in the western Pacific.

Conduct operational and economic research for regulatory flexibility analysis of management actions.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

NOAA Strategic Plan elements:

Build Sustainable Fisheries
Recovery Protected Species
Preserve Marine Habitat.

Magnuson-Stevens Act mandates data collection and collaboration with Council.

Regulatory Flexibility Act mandates economic analysis.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Timeliness and accuracy of summary reports; timeliness of access to high-quality data.

Date of access following each calendar quarter; frequency of up-dates and corrections.

Timeliness and acceptance of operational and economic research.

Meeting deadlines and acceptance of results by SWR.

6. Products/Services

Quarterly and annual logbook summary reports.
Annual logbook and shoreside monitoring data sets.

Federal fishery and island fishery annual reports for Council and NMFS Fisheries of the U.S.
Operational and economic research administrative reports and journal publications.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: Western Pacific Regional Fishery Management Council; NMFS SWR; UH researchers

Suppliers: Federally-permitted fishermen; Seafood dealers; Island fishery agencies

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

SWR PIAO for Federally-managed fisheries (permits, logbook formats, etc.)

SWFSC HL research programs

UH JIMAR Pelagic Fisheries Research Program for economic research

CURRENT YEAR OPERATING PLAN - FORM 5

FY 1998

CYOP Number: SWC - 701

Lab/Div: Honolulu Laboratory

Page: 1

Title: Fisheries Monitoring and Economics

Leader: Sam Pooley

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C1A76	A	1	Code, edit, enter, and verify fishery-dependent and research data for the Laboratory	10/97	9/98
	A	2	Retrieve, reformat, and archive Laboratory data	10/97	9/98
8L1C1A75	A	3	Coordinate activities of the WPacFIN Fisheries Data Coordinating Committee	10/97	9/98
	A	4	Collect, compile, and maintain fisheries data from fisheries agencies in American Samoa, Guam, Hawaii, and Northern Mariana Islands	10/97	9/98
	M	5	Produce current-year volume of <i>Fisheries Statistics of the Western Pacific</i> from WPacFIN data	----	6/98
	M	6	Produce WPacFIN/FMPI web pages	----	9/98
8L1C2A74	A	7	Collect and compile biological, operational, and economic data from commercial and recreational fisheries in the central Pacific,	10/97	9/98
	E	8	Issue quarterly and annual reports from Federal logbooks, including fishing catch and effort and protected species interactions	10/97	9/98

M	9	Prepare annual reports on Federally-monitored fisheries in the central Pacific (NWHI bottomfish, NWHI lobster, Hawaii longline, American Samoa longline)	---	8/98
A	10	Participate in Council plan teams and other Council activities	10/97	9/98
A	11	Coordinate and conduct economic research	10/97	9/98
A	12	Continue conversion of fishery monitoring data bases into Oracle	10/97	9/98

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S702	CYOP TITLE:	FISHERIES MANAGEMENT SCIENCE	
TASK#:	8L1A4B74	TASK TITLE:	ECOSYSTEM & HABITAT PROGRAM	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
PARRISH	FRANK	A	11 1	1	
SEKI	MICHAEL	P	12 3	1	

TOTAL LABOR (\$K) (1100):	84.9
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	17.8
TOTAL COLA (1213)	19.1
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.4
TOTAL TASK (\$K):	122.2

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

S702	Lab/Div: Honolulu Laboratory	CYOP Title: Fisheries Management Science
Prepared: 11/18/97	Current Year Task #: 8L1A4B74	Task Title: Ecosystem & Habitat Program
Reader: Polovina	Prior Year Task #: 8L1A4B74	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic: AGU Ocean Science Mtg	1,740		Training:	
			Contracts: Dive Equipment	2,000
Foreign:				
TOTAL TRAVEL =				
1,740				
TRANSPORTATION OF THINGS	COSTS		TOTAL CONTRACTS =	2,000
		26	SUPPLIES (List major expenses)	COSTS
			Lab Supplies	3,000
			Diving Supplies	1,000
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 4,000	
RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =			TOTAL EQUIPMENT =	
COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	
PRINTING	COSTS			
Reports	1,000			
TOTAL PRINTING =				
1,000				

TOTAL OTHER OBJECTS	8,740
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S702	CYOP TITLE:	FISHERIES MANAGEMENT SCIENCE	
TASK#:	8L1A6A71	TASK TITLE:	FISH BIOLOGY AND ECOLOGY	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
BOGGS	CHRISTOFER	H	13	4	0.75	GS14-1, .75 FTE
CHANG	RANDOLPH	K	11	10	1	
KAZAMA	THOMAS	K	11	10	1	
MOFFITT	ROBERT	B	11	6	1	
MUNDY	BRUCE	C	11	6	1	
SHIOTA	PAUL	M	11	9	1	

TOTAL LABOR (\$K) (1100):	286.3
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	60.1
TOTAL COLA (1213)	64.4
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	1.2
TOTAL TASK (\$K):	412.0

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

S702	Lab/Div: Honolulu Laboratory	CYOP Title: Fisheries Management Science
Prepared: 11/18/97	Current Year Task #: 8L1A6A71	Task Title: Fish Biology and Ecology
Reader: Boggs	Prior Year Task #: 8L1A6A71	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic: Wakefield	1,300		Training:	
Dana Point	1,000		Contracts:	
Tuna Conference	5,000			
Foreign:				
TOTAL TRAVEL =				
		TOTAL CONTRACTS =		
TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
			Lab Supplies	1,000
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 1,000	
RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =			TOTAL EQUIPMENT =	
COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	
PRINTING	COSTS			
Reprints	300			
TOTAL PRINTING = 300				

TOTAL OTHER OBJECTS	8,600
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S702	CYOP TITLE:	FISHERIES MANAGEMENT SCIENCE			
TASK#:	8L1A6A73	TASK TITLE:	LIFE HISTORY			DATE: 26-Jan-98
LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
SAMPAGA	JEFFREY	D	6	7	1	
UCHIYAMA	JAMES	H	11	10	1	
NISHIMOTO	ROBERT	N	11	9	1	
HUMPHREYS	ROBERT	L	11	3	1	
DE MARTINI	EDWARD	E	13	0	1	
WILLIAMS	HAPPY	A	6	5	1	
TOTAL LABOR (\$K) (1100):						246.0
TOTAL PREMIUM PAY (1150):						0.0
TOTAL EC (1210):						51.7
TOTAL COLA (1213)						55.4
TOTAL AWARDS (1159)						0.0
TOTAL TRAINING (25XX)						1.2
TOTAL TASK (\$K):						354.3

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

S702	Lab/Div: Honolulu Laboratory	CYOP Title: Fisheries Management Science
Prepared: 11/18/97	Current Year Task #: 8L1A6A73	Task Title: Life History
Reader: DeMartini	Prior Year Task #: 8L1A6A73	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic: Tuna Conference	2,200		Training:	
			Contracts:	
Foreign:				
TOTAL TRAVEL =				2,200

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
		26	SUPPLIES (List major expenses)	COSTS
			Software Upgrade	1,500
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 1,500	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	

PRINTING	COSTS	TOTAL OTHER OBJECTS		
Reprints	500	4,200		
TOTAL PRINTING = 500				

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S702	CYOP TITLE:	FISHERIES MANAGEMENT SCIENCE		
TASK#:	8L1A6A77	TASK TITLE:	CRUISE EXPENSES	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
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TOTAL LABOR (\$K) (1100):	0.0
TOTAL PREMIUM PAY (1150):	66.0
TOTAL EC (1210):	0.0
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.0
TOTAL TASK (\$K):	66.0

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

S702		Lab/Div: Honolulu Laboratory		CYOP Title: Fisheries Management Science	
Prepared: 11/18/97		Current Year Task #: 8L1A6A77		Task Title: Cruise Expenses	
Leader: Laurs		Prior Year Task #: --			

TRAVEL		COSTS	25	CONTRACTS		COSTS
Domestic:				Training:		
				Contracts:		
Foreign:						
TOTAL TRAVEL =						

TRANSPORTATION OF THINGS		COSTS	TOTAL CONTRACTS =			
			26	SUPPLIES (List major expenses)		COSTS
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =			

RENTS, COMM., UTIL			31	EQUIPMENT (List major items)		COSTS
TOTAL R-C-U =						

COMPUTER		COSTS	TOTAL EQUIPMENT =			
Gov. Owned/Leased:			41	GRANTS & CO-OP AGREEMENTS		COSTS
Contracted:						
TOTAL COMPUTER =			TOTAL G & C-O =			

PRINTING		COSTS					
TOTAL PRINTING =			TOTAL OTHER OBJECTS				-0-

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S702	CYOP TITLE:	FISHERIES MANAGEMENT SCIENCE		
TASK#:	8L1A7A70	TASK TITLE:	STOCK ASSESSMENT	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
DINARDO	GERARD	T	12	7	1	
KLEIBER	PIERRE	M	13	10	1	
SKILLMAN	ROBERT	A	13	0	1	
WETHERALL	JERRY	A	14	0	0.75	

TOTAL LABOR (\$K) (1100):	246.7
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	51.8
TOTAL COLA (1213)	55.5
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.8
TOTAL TASK (\$K):	354.8

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

S702	Lab/Div: Honolulu Laboratory	CYOP Title: Fishery Management Science
Prepared: 11/18/97	Current Year Task #: 8L1A7A70	Task Title: Stock Assessment
Leader: Wetherall	Prior Year Task #: 8L1A7A70	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic: SA Workshop	3,000		Training:	
Dana Point Planning	1,000		Contracts:	
Home Leave (JAW, RAS)	2,700			
Other Travel	9,400			
Foreign: North Pacific Albacore Workshop	2,000			
TOTAL TRAVEL =				18,100
TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
			Lobster Cruises	20,000
			Software Upgrades	2,000
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	22,000
RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
Miscellaneous	300		Scales (Lobster sampling)	3,000
TOTAL R-C-U =			TOTAL EQUIPMENT =	3,000
COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:			JIMAR - Menpachi Support	5,000
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =	5,000
PRINTING	COSTS			
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	\$48,400
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S702	CYOP TITLE:	FISHERIES MANAGEMENT SCIENCE				
TASK#:	8L1C5A73	TASK TITLE:	FISHERIES OCEANOGRAPHY/ECOSYSTEM RESEARCH			DATE:	26-Jan-98
LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES	
KOBAYASHI	DONALD	R	11	3	1		
POLOVINA	JEFFREY	J	14	9	1		
TOTAL LABOR (\$K) (1100):					116.6		
TOTAL PREMIUM PAY (1150):					0.0		
TOTAL EC (1210):					24.5		
TOTAL COLA (1213)					26.2		
TOTAL AWARDS (1159)					0.0		
TOTAL TRAINING (25XX)					0.4		
TOTAL TASK (\$K):					167.7		

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

S702	Lab/Div: Honolulu Laboratory	CYOP Title: Fisheries Management Science
Prepared: 11/18/97	Current Year Task #: 8L1C5A73	Task Title: Fisheries Oceanography/Ecosystem
Leader: Polovina	Prior Year Task #: 8L1C5A73	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic: Washington, DC (Polovina)	4,000		Training:	
SAW/Tuna Conference (Kobayashi)	2,000		Contracts:	
AGU (Polovina, Brainard)	4,000			
Tuna Conference (Polovina)	2,000			
Foreign:				
TOTAL TRAVEL =				12,000
TRANSPORTATION OF THINGS	COSTS	26	TOTAL CONTRACTS =	
			SUPPLIES (List major expenses)	
			COSTS	
			Computer Supplies	3,000
			Software Fees (Matlab)	2,000
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	
			5,000	
RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	
			COSTS	
			Sun Memory Upgrade	3,500
TOTAL R-C-U =				
COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		3,500		
		41	GRANTS & CO-OP AGREEMENTS	
Contracted:			COSTS	
TOTAL COMPUTER =		TOTAL G & C-O =		
PRINTING	COSTS			
Page Charges	2,000			
TOTAL PRINTING =				
		TOTAL OTHER OBJECTS 22,500		

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 702

Lab/Div: Honolulu Laboratory

Page: 1

CYOP Title: Fisheries Management Science

Leader: R. Michael Laurs

Task Numbers	1st <u>8L1A7A70</u>	2nd <u>8L1C5A73</u>	3rd <u>8L1A4B74</u>
	4th <u>8L1A6A71</u>	5th <u>8L1A6A73</u>	6th <u>8L1A6A77</u>
Task Budget Totals	\$ <u>403.2</u> K	\$ <u>190.2</u> K	\$ <u>130.9</u> K
	\$ <u>420.6</u> K	\$ <u>358.5</u> K	\$ <u>66.0</u> K

CYOP Budget Totals:

Personnel: \$ 1473.0 K Other Objects: \$ 96.4 K Total: \$ 1569.4 K

1. Major Fisheries Associated with CYOP

1. Hawaii longline fishery for swordfish and tuna
2. Other domestic and foreign pelagic fisheries in the central and western Pacific Ocean.
3. NWHI trap fishery for spiny and slipper lobster
4. Hawaii handline fishery for bottomfish

2. Fishery Management or Recovery Plans Associated with CYOP

1. Western Pacific Pelagics FMP
2. Western Pacific Crustaceans FMP
3. Western Pacific Bottomfish and Seamount Resources FMP
4. U.S. Pacific Sea Turtle Recovery Plan
5. Hawaiian Monk Seal Recovery Plan

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Management of central and western Pacific marine fisheries and recovery of protected species by NMFS, the WPRFMC, and multinational organizations requires reliable and timely scientific advice based on comprehensive fishery monitoring, stock assessment, and biological and oceanographic research.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To provide timely and accurate assessments of the status of fish stocks.
2. To understand relationships and linkages between physical ocean processes and biological and ecological processes, and the relationship of these processes to fisheries.
3. To understand fundamental biological mechanisms that determine marine resource distribution and abundance.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

1. Stock assessment is accomplished by developing and applying quantitative models to data from field surveys, fishery statistics, and laboratory studies, and through computer simulations.
2. Statistical methods and models are used to study ocean processes and ecosystem dynamics. Data are integrated from many sources, including in situ biological and oceanographic studies, fishery statistics, population surveys, ocean circulation models, and satellite-borne remote sensors.
3. Fish biology and ecology studies involve surveys, sampling, and experiments conducted at sea aboard the NOAA research vessel Townsend Cromwell and other vessels. Laboratory research is conducted ashore on preserved biological specimens. A variety of statistical and analytical methods are applied.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

This research is essential to development and implementation of FMPs by the WPRFMC and NMFS, and helps provide a rigorous scientific foundation for management decisions and policies with respect to marine resources in the central and western Pacific Ocean.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Success is measured in terms of stock assessment advice to WPRFMC and NMFS; technical support of fishery management decisions; informational reports to fishery managers, members of the commercial and recreational fishing community, and the general public; and publication of research findings in the peer-reviewed scientific literature.

6. Products/Services

Stock assessment reports; fishery management advisories; contributions to annual status reports for pelagics, crustaceans, and bottomfish; scientific and technical publications; expertise provided to various committees of the WPRFMC and international fishery management bodies.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients - NMFS managers; WPRFMC; commercial and recreational fishers and related fishing industry constituents.

Suppliers - Commercial and recreational fishers; research colleagues in the U.S. and abroad.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Linkages with La Jolla Laboratory, Pacific Fisheries Environmental Group, other NMFS and NOAA offices, academia, IATTC, other regional fishery research and management bodies and foreign fishery research laboratories.

CURRENT YEAR OPERATING PLAN - FORM 5
FY 1998

CYOP Number: SWC - 702

Lab/Div: Honolulu Laboratory

Page: 1

Title: Fishery Management Science

Leader: R. Michael Laurs

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1A7A70	A	1	Provide scientific support for implementation of Crustaceans FMP	10/97	9/98
	M	2	Issue NWHI lobster status of stocks report	---	4/98
	A	3	Conduct NWHI lobster stock assessment and research cruises (with Task 8L1A6A71)	3/98	9/98
	A	4	Conduct cooperative U.S.-Japan swordfish stock assessment	1/98	9/98
	M	5	Report swordfish stock assessment results to ISC Swordfish Working Group and general ISC meeting	---	9/98
	A	6	Develop simulation model of swordfish population dynamics	12/97	9/98
	A	7	Conduct cooperative U.S.-Japan blue shark population assessment	1/98	9/98
	E	8	Compute and issue estimates of take and mortality of turtles and seabirds in Hawaii longline fishery	---	3/98
	E	9	Host and conduct international workshop on statistical methods for estimation of turtle and seabird takes in longline fisheries	---	4/98
	E	10	Issue longline take statistics workshop report	---	9/98

	A	11	Coordinate development of Oracle database and GIS systems for Honolulu Laboratory (including direction of related JIMAR projects)	10/97	9/98
	A	12	Develop comprehensive system for user access to Hawaii pelagic fishery statistics in support of research and management	10/97	9/98
8L1C5A73	M	1	Write manuscript on spiny lobster larval dynamics	---	2/98
	M	2	Convene special session at ocean sciences meeting on new tools for fisheries research	---	3/98
	A	3	Develop computer tools to access and analyze ocean color data	10/97	9/98
	A	4	Prepare 2 posters for ocean sciences meeting	10/97	2/98
8L1A4B74	A	1	Conduct subtropical front cruise	---	5/98
	A	2	Conduct monk seal forage & reef fish survey cruise	6/98	9/98
	M	3	Complete crittercam manuscript	---	12/97
8L1A6A71	A	1	Lead JIMAR projects on environmental and operational effects on swordfish fishing success	10/97	9/98
	A	2	Lead JIMAR project on archival tagging of swordfish and bigeye tuna	10/96	9/98
	M	3	Organize and conduct the Lake Arrowhead Tuna Conference in May 1998 and compile proceedings as SWFSC Administrative Report	10/97	7/98
	A	4	Conduct conventional tag & release program on swordfish	10/96	9/98
	A	5	Define and describe essential fish habitat for pelagic management unit species	12/97	9/98
	A	6	Conduct research cruises to study swordfish and bigeye tuna ecology, life history and gear vulnerability	10/97	9/98
	M	7	Complete Hawaii bottomfish section for annual WPRFMC status of stocks report (with 8L1C5A73)	---	8/98
8L1A6A73	A	1	Provide scientific input to Swordfish Research Team	10/97	9/98
	A	2	Corroborate/validate swordfish fin ray age estimates	10/97	9/98
	A	3	Provide scientific input to Lobster Research Team	10/98	9/98
	A	4	Analyze body size-at-maturity of slipper lobster	1/98	3/98

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S703	CYOP TITLE:	PROTECTED SPECIES - MONK SEAL	
TASK#:	8L1AMS77	TASK TITLE:	MARINE MAMMAL RESEARCH PROGRAM	DATE: 09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
HENDERSON	JOHN	R	11 8	1	
~~SISSON~~	JOYCE	E	9 4	0.3	
JOHANOS KAM	THEA	C	9 6	0.8	
DOLLAR	ROBERT	A	8 3	1	
BECKER	BRENDA	L	7 6	1	
ANTONELIS	GEORGE	A	13 4	1	
~~RAGEN~~	TIMOTHY	J	13 3	1	
<i>Baker Jason</i>					

TOTAL LABOR (\$K) (1100):	254.4
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	53.4
TOTAL COLA (1213)	57.2
TOTAL AWARDS (1159)	2.4
TOTAL TRAINING (25XX)	1.2
TOTAL TASK (\$K):	368.6

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

S703	Lab/Div: Honolulu Laboratory	CYOP Title: Protected Species - Monk Seal
Prepared: 1/23/98	Current Year Task #: 8L1AMS77	Task Title: Marine Mammal Program
Prepared by: Antonelis	Prior Year Task #: 8L1AMS77	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic: Washington DC	3000		Training:	
SWC	3,000		Contracts:	
Interisland Monk Seal Tagging	1,000		Dive Training	6,300
Training - Antonelis	5,000			
Reef Fish and Natl Geo. Travel	7,500			
Foreign: Monaco (2 travelers @ 3.0K)	6,000			
Monaco (3 travelers Reg. Fee)	1,500			
TOTAL TRAVEL =				
		TOTAL CONTRACTS = 6,300		
TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
			Computer Upgrades	3,000
			Office and Lab Supplies	4,900
			TC 98-09 Seal Ecology Supplies	5,700
				16,600
TOTAL TRANSPORTATION =		TOTAL SUPPLIES = 30,200		
RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
Maritime Marine Health Services	7,400		Computer	2,500
TOTAL R-C-U =		TOTAL EQUIPMENT = 2,500		
COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:			JIMAR (Boland)	30,000
Contracted:				
TOTAL COMPUTER =		TOTAL G & C-O = 30,000		
PRINTING	COSTS			
Monk Seal Publications and Reports	2,000			
TOTAL PRINTING =				

TOTAL OTHER OBJECTS	105,400
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 703

Lab/Div: Honolulu Lab

Page: 1

CYOP Title: Protected Species Investigations

Leader: George Antonelis

Task Numbers 1st 8L1AMS77 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 474.0 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 367.4 K Other Objects: \$ 106.6 K Total: \$ 474.0 K

1. Major Fisheries Associated with CYOP

1. NWHI Lobster Fishery
2. NWHI Bottomfish Fishery

2. Fishery Management or Recovery Plans Associated with CYOP

1. Hawaiian Monk Seal Recovery Plan
2. Western Pacific Fisheries Management Council
3. Endangered Species Act
4. Marine Mammal Protection Act

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

The Hawaiian monk seal is the only endangered pinniped found entirely within U.S. waters, and its two congeners (the Caribbean and Mediterranean monk seals) have declined severely. The Caribbean species is thought to be extinct and the Mediterranean species is on the verge of extinction. Population estimates indicate that Hawaiian monk seal numbers have decreased approximately 60% since the late 1950s. The Hawaiian monk seal population has declined at a rate of approximately 5% annually during the last 2 decades and its size is currently estimated between 1,300 and 1,400 individuals. The limited size and distribution of the Hawaiian monk seal population makes it extremely vulnerable to unforeseen natural or anthropogenic perturbations which could result or contribute to the extinction of this species.

2. Objectives (What are the major objectives being pursued by this CYOP?)

- 1. Assess Hawaiian monk seal population trends at each of 6 major reproductive sites in the Northwest Hawaiian Islands.
- 2. Investigate the biology, ecology and natural history of the Hawaiian monk seal population.
- 3. Identify, mitigate, as appropriate, and monitor factors impeding population growth.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Use of scientific methodology and testing of null hypotheses are the primary means of evaluating population trends and assessing the potential natural and anthropogenic factors influencing population growth. Scientific information for this research is collected during field camps which are established at all major reproductive sites. Data from these field camps are used to determine survival rates, sources of mortality, foraging ecology, disease, health and condition of individual animals, individual growth patterns and behavior.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

The Hawaiian monk seal is the most endangered pinniped within U.S. waters. Activities funded under this CYOP are necessary to fulfill the goals of the NOAA and NMFS Strategic Plans, the MMPA, the ESA, and the Hawaiian Monk Seal Recovery Plan for recovering this protected and endangered species.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The ultimate measure of success for this CYOP is an increase in the growth of the Hawaiian monk seal population or a reduction in the rate of decline, especially at French Frigate Shoals. The success of this program is also judged by the publication of information required for the evaluation and implementation of actions designed to enhance the growth of the Hawaiian monk seal population.

6. Products/Services

A NOAA Technical Memorandum will be produced to summarize the most recent data and the status of the Hawaiian monk seal population.

Information on the biology, ecology, and natural history of monk seals will be presented to the Hawaiian Monk Seal Recovery Team during their annual meeting.

Background information will be provided for the revision of the 3-Year Research and Recovery Plan for the Hawaiian Monk Seal as well as the Midway Recovery Plan.

Verbal presentations will be provided as appropriate

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients

NMFS Office of Protected Resources

NMFS Southwest Region

Western Pacific Regional Fisheries Management Council

US Fish and Wildlife Service

State of Hawaii

Marine Mammal Commission

Hawaiian Monk Seal Recovery Team

Pacific Scientific Review Group

Suppliers

University of Hawaii Joint Institute of Marine Research

University of Hawaii

Hawaii Wildlife Fund

University of Wisconsin

Montana State University

Texas A&M University

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

NMFS PR

NMFS SWR

NMFS SWC

USF&WS

NOAA Research Vessel Townsend Cromwell

US Coast Guard

State of Hawaii

University of Hawaii

FY 1998

CYOP Number: SWC - 703

Lab/Div: SWC Honolulu

Page: 1

Title: Protected Species Investigations Hawaiian Monk Seal Program

Leader: George Antonellis

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1AMS77	E	1	Participate in Hawaiian Monk Seal Recovery Team Meeting	12/97	12/97
8L1AMS77/ (8L2BER70)	A	2	Initiate Hawaiian Monk Seal (HMS) Field Camps on NWHI to Collect Data Used to Assess Population Status	03/98	08/98
8L1AMS77	M	3	Complete Draft Technical Memorandum of 1998 HMS Investigations	09/98	12/98
8L1AMS77	E	4	Participate in the Society of Marine Mammalogists Biennial Meeting	01/98	01/98
8L1AMS77	M	5	Complete Recovery Plan for Midway Atoll Monk Seal Population	10/97	04/98
8L1AMS77	M	6	Complete Report on the Use of Video Technology ("crittercam") for Identification and Assessment of Monk Seal Foraging Habitat	10/97	12/97
8L1AMS77	M	7	Complete Report on Hawaiian Monk Seal Rehabilitation	10/97	09/98

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S704	CYOP TITLE:	PROTECTED SPECIES - SEA TURTLE		
TASK#:	8L1AHT79	TASK TITLE:	MARINE TURTLE RESEARCH PROGRAM	DATE:	09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
BALAZS	GEORGE	H	13 3	1	
WETHERALL	JERRY	A	14 0	0.25	

TOTAL LABOR (\$K) (1100):	76.7
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	16.1
TOTAL COLA (1213)	17.3
TOTAL AWARDS (1159)	1.2
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	111.5

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

6704	Lab/Div: Honolulu Laboratory	CYOP Title: Protected Species - Sea Turtle
Prepared: 11/18/97	Current Year Task #: 8L1AHT79	Task Title: Marine Turtle Research Program
Prepared by: Balazs	Prior Year Task #: 8L1AHT79	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic: Hawaii Inter-Island Trips	2,000		Training:	
Invitational Workshops & Meetings	8,000		Contracts: Stranding Response	2,000
			Clinical Vet Care	2,000
Foreign:				
TOTAL TRAVEL =				10,000

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 4,000		
Shipment of Turtles	2,000	26	SUPPLIES (List major expenses)	COSTS
			Necropsy Supplies	1,000
TOTAL TRANSPORTATION =				2,000

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				

COMPUTER	COSTS	TOTAL EQUIPMENT =		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
			JIMAR	105,000
Contracted:				
TOTAL COMPUTER =				

PRINTING	COSTS	TOTAL G & C-O = 105,000		
NOAA TM Report	2,500			
TOTAL PRINTING =		2,500		

TOTAL OTHER OBJECTS	124,500
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 704

Lab/Div: Honolulu

Page: 1

CYOP Title: Marine Turtle Research

Leader: George H. Balazs

Task Numbers 1st 8L1AHT79 2nd _____ 3rd _____ 4th _____

Task Budget Totals \$ 236.0 K \$ _____ K \$ _____ K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 111.3 K Other Objects: \$ 124.7 K Total: \$ 236.0 K

1. Major Fisheries Associated with CYOP

1. North Pacific Pelagic longline fisheries
- 2.
- 3.

2. Fishery Management or Recovery Plans Associated with CYOP

1. U.S. Pacific Sea Turtle Recovery Plan
2. Biological Opinion for Hawaii-based longline fishery
3. Hawaiian Sea Turtle Recovery Plan
4. Research Plan for Marine Turtle Fibropapilloma
- 5.
- 6.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

This CYOP is dedicated to the resolution of biological information on sea turtles that will aid in managing and recovering threatened and endangered populations to levels of abundance where protection under the U.S. Endangered Species Act will no longer be required, and interactions with fisheries will be of reduced importance.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To determine essential life history and biological attributes of sea turtles.
2. To monitor population trends in order to ascertain success of recovery efforts.
3. To investigate commercial fishery interactions with sea turtles for the purpose of estimating take and mortality and formulating mitigation measures.
4. To determine the cause of sea turtle fibropapilloma disease in order to formulate appropriate management measures.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

The scientific method, involving the testing of null hypotheses, is the foundation of this sea turtle research and recovery project. The approach involves substantial work in a variety of habitats used by naturally occurring sea turtle populations.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

This project directly supports the NMFS strategic plan objectives to recover protected species and to build sustainable fisheries.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Measures of success include the number of relevant published scientific journal articles and reports, the capacity to provide data and information relevant to biological recovery and management, and the level of successful outreach to communicate findings and application to solving issues of importance.

6. Products/Services

- Journal articles
- Technical reports
- Data, information and advice
- Verbal presentations

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients NMFS SWR, F/PR, WPRFMC, NGO's, USFWS, and the State of Hawaii.

Suppliers NMFS SWR, F/PR and USFWS.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

This project has strong linkages of coordination and collaboration with NMFS F/PR, La Jolla Laboratory, SWR, State of Hawaii DLNR, WPRFMC, USFWS, USGS, NPS and the University of Hawaii (including JIMAR).

Leader: George H. Balazs

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date/finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
	M	1	Complete Fibropapilloma Workshop II report	12/97	06/98
	A	2	Assess health status at four in-water sea turtle study sites	11/97	08/98
	M	3	Determine 1998 magnitude of nesting at FFS	05/98	08/98
	A	4	Determine value of satellite dive recorders in evaluating post-hooking survival	12/97	09/98
	A	5	Deploy satellite transmitters on post-hooked turtles	01/98	08/98
	A	6	Publish co-authored manuscript on herpesvirus infection in fibropapilloma disease	11/97	05/98

Tiburon Laboratory

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S800	CYOP TITLE:	ADMIN & RESEARCH SUPPORT - TIBURON	
TASK#:	9WGN4080	TASK TITLE:	GENERAL SUPPORT - TIBURON	DATE: 29-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
MAVRANTONIS	ELAINE	M	7 10	1	
PETRAITIS	ADRIENNE	J	6 5	1	
SPURGEON	MARIE	S	6 5	1	
VICE	DIRECTOR	E	15 0	0.5	
YOKOTA	ISSEI	N	11 4	1	

TOTAL LABOR (\$K) (1100):	176.7
TOTAL PREMIUM PAY (1150):	0.5
TOTAL EC (1210):	37.1
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.9
TOTAL TASK (\$K):	215.2

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

TI800.820

S800	Lab/Div: Tiburon Laboratory	CYOP Title: Administration
Prepared: DEC. 3, 1997	Current Year Task #:9WGN4080	Task Title: Administrative Support
Prepared by: Laboratory Director	Prior Year Task #:9WGN4080//82	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
			Janitorial	9.6
			Environmental Compliance	17.0
Foreign:			Grounds Maintenance	12.0
			Building Maintenance & Repairs	22.4
			Trash Removal	3.0
			Other	17.8
TOTAL TRAVEL =	0.0		TOTAL CONTRACTS =	81.8
TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
	2.5		Office Supplies	5.5
			Maintenance Supplies	4.8
			Other	1.2
TOTAL TRANSPORTATION =	2.5		TOTAL SUPPLIES =	11.5
RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
Telephone	12.0			
Electricity	11.2			
Water	1.4			
TOTAL R-C-U =	24.6		TOTAL EQUIPMENT =	0.0
COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =	0.0		TOTAL G & C-O =	0.0
PRINTING	COSTS			
	0.6			
TOTAL PRINTING =	0.6			

TOTAL OTHER OBJECTS	\$ 121.0
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**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S811	CYOP TITLE:	GROUNDFISH ANALYSIS BRANCH		
TASK#:	8L1AGF81	TASK TITLE:	GROUNDFISH ANALYSIS INVESTIGATION (PPA)	DATE:	09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
RALSTON	STEPHEN	V	13	0	1	
WOODBURY	DAVID	P	9	6	1	
SPRINGBORN	ROBERT	R	11	1	1	
ROBERTS	DALE	A	11	3	1	
PEARSON	DONALD	E	11	4	1	
MAC CALL	ALEC	D	14	10	1	
SAKUMA	KEITH	M	11	2	1	

TOTAL LABOR (\$K) (1100):	373.1
TOTAL PREMIUM PAY (1150):	31.9
TOTAL EC (1210):	78.4
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	4.9
TOTAL TRAINING (25XX)	1.4
TOTAL TASK (\$K):	489.7

TI811.822

C Financial Form #2 - Revised 8/97

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

TI811.821

S811		Lab/Div: Tiburon Laboratory		CYOP Title: Groundfish Analysis Branch	
Prepared: December 3, 1997		Current Year Task #: 8L1C2A80		Task Title: Groundfish Analysis	
Leader: Alec MacCall		Prior Year Task #: 8L1C2A80			

TRAVEL		COSTS	25	CONTRACTS		COSTS
Domestic:				Training:		
				Contracts: ADCP Data analysis		7.5
				Plankton sorting -- existing MOCNESS samples		10.0
				Plankton sorting -- samples from May/June 1998		10.0
Foreign:						
		0.0				
TOTAL TRAVEL =						
TRANSPORTATION OF THINGS		COSTS	TOTAL CONTRACTS = 27.5			
			26	SUPPLIES (List major expenses)		COSTS
				Misc. Supplies		6.0
TOTAL TRANSPORTATION =		0.0	TOTAL SUPPLIES = 6.0			
RENTS, COMM., UTIL			31	EQUIPMENT (List major items)		COSTS
				Misc. Equipment		3.5
TOTAL R-C-U =		0.6	TOTAL EQUIPMENT = 3.5			
COMPUTER		COSTS	41 GRANTS & CO-OP AGREEMENTS			
Gov. Owned/Leased:					COSTS	
Contracted:						
TOTAL COMPUTER =		0.0	TOTAL G & C-O = 0.0			
PRINTING		COSTS	TOTAL OTHER OBJECTS \$ 37.6			
TOTAL PRINTING =		0.0				

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 811**Lab/Div:** Tiburon Laboratory**Page:** 1**CYOP Title:** Groundfish Analysis Branch**Leader:** Alec MacCall**Task Numbers** 1st 8L1AGF81 2nd 8L1C2A80 3rd _____ 4th _____**Task Budget Totals** \$ 559.3 K \$ 37.6 K \$ _____ K \$ _____ K**CYOP Budget Totals:**Personnel: \$ 488.3 K Other Objects: \$ 108.6 K Total: \$ 596.9 K**1. Major Fisheries Associated with CYOP**

1. West Coast Groundfish

2. Fishery Management or Recovery Plans Associated with CYOP

1. West Coast Groundfish

NARRATIVE SECTION**1. Problem Statement** (What management or scientific problem or issue does this CYOP help solve?)

This Investigation provides information needed to implement the groundfish management plan of the Pacific Fishery Management Council.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To obtain fishery dependent and independent data needed to assess and manage groundfish.
2. To improve assessment and management of groundfish by providing information to decision-makers.
3. To improve knowledge of groundfish recruitment processes,

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Collaborate with other agencies in collection and processing of fishery dependent and independent data. Use state-of-the-art assessment techniques and evaluate assessment and management with simulation models. Develop fishery independent biomass estimates such as YOY survey and larval production method. Collect oceanographic data in conjunction with surveys and develop models relating to abundance, survival and distribution of YOY with environmental factors.

Work plans are based on stated general needs of the PFMC, specific needs of the Groundfish Management Team, consultation with members of the scientific and fishing industry communities and direction by the SWC.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Support of the Fishery Management Councils is central to the NMFS goal of "Build and Maintain Sustainable Fisheries" and its first three Objectives (maintain healthy stocks, eliminate overfishing and rebuild overfished stocks, and increase long-term benefits). By providing timely and accurate information to decision-makers, the Council-based management system will work optimally.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The information provided to the Pacific Fishery Management Council and its entities (Groundfish Management Team, Scientific and Statistical Committee) is as complete, accurate and timely as available data and technology allows. Uncertainty has been reduced to the minimum that can be achieved objectively (this is done by use of maximum likelihood statistical techniques). Development of rockfish recruitment forecasts by means of monitoring abundance of young-of-the-year juveniles promises substantial reductions in uncertainty.

6. Products/Services

Stock assessments are incorporated in the Council's annual stock status document. Staff regularly publishes in peer-reviewed journals and administrative reports and presents talks at scientific meetings.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: Our main clients are the PFMC and its entities. Staff responds to requests for information by the fishing industry and other scientists.

Suppliers: We are dependent on west coast states, PacFIN, AFSC, PFEL and various internet sources for data.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

AFSC Sandpoint Lab, NWC Newport Lab, PFEL, CDFG, ODF&W, WDF&W, U.C. Davis, San Francisco State University, Moss Landing Laboratory and SWC La Jolla Lab.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1998

CYOP Number: SWC - 811

Lab/Div: Tiburon Laboratory

Page: 1

Title: Groundfish Analysis Branch

Leader: Alec MacCall

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C2A80 8L1AGF81	A	1	Participate in groundfish monitoring program.	ongoing	
8L1C2A80 8L1AGF81	M	2	Contribute paper on use of precaution in fishery management to NMFS SAW.		02/98
8L1C2A80 8L1AGF81	A	3	Continue research on optimal fishery management systems.	ongoing	
8L1C2A80 8L1AGF81	A	4	Participate in PFMC activities and support Council process.	ongoing	
8L1C2A80 8L1AGF81	E	5	Conduct survey for juvenile rockfish.	05/98	06/98
8L1AGF81	M	6	Conduct chilipepper rockfish stock assessment (contract).	02/98	09/98
8L1C2A80 8L1AGF81	M	7	Conduct groundfish stock assessment (species/stock not yet determined).	01/98	09/98
8L1C2A80	M	8	Complete DODS final report.	10/97	07/98

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S812	CYOP TITLE:	COASTAL COMMUNITIES BRANCH		
TASK#:	8L1AGF80	TASK TITLE:	COASTAL COMMUNITIES (PPA)	DATE:	09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
ADAMS	PETER	B	13	4	0.5	QSI
HOBSON JR	EDMUND	S	14	0	1	
LAIDIG	TOM	E	11	2	0.5	
SILBERBERG	KELLY	R	9	3	0.5	

TOTAL LABOR (\$K) (1100):	161.5
TOTAL PREMIUM PAY (1150):	5.0
TOTAL EC (1210):	33.9
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	1.5
TOTAL TRAINING (25XX)	0.5
TOTAL TASK (\$K):	202.4

(OTHER OBJECTS EXPENSES)

TI812.821

S812		Lab/Div: Tiburon Laboratory		CYOP Title: Coastal Communities Branch	
Prepared: December 3, 1997		Current Year Task #: 8LIAGF80		Task Title: Lingcod Fishery (PPA)	
Reader: Edmund Hobson		Prior Year Task #: 8LIAGF80			

TRAVEL		COSTS	25	CONTRACTS		COSTS
Domestic:				Training:		
Western Groundfish Conference		1.5		Contracts:		
				Fin-ray sectioning		2.5
Foreign:						
A.S.I.H. (Canada)		1.0				
TOTAL TRAVEL =		2.5				
TRANSPORTATION OF THINGS		COSTS	TOTAL CONTRACTS = 2.5			
			26	SUPPLIES (List major expenses)		COSTS
TOTAL TRANSPORTATION =		0.0	TOTAL SUPPLIES = 0.0			
RENTS, COMM., UTIL			31	EQUIPMENT (List major items)		COSTS
TOTAL R-C-U =		0.0	TOTAL EQUIPMENT = 0.0			
COMPUTER		COSTS	41	GRANTS & CO-OP AGREEMENTS		COSTS
Gov. Owned/Leased:						
Contracted:						
TOTAL COMPUTER =		0.0	TOTAL G & C-O = 0.0			
PRINTING		COSTS				
TOTAL PRINTING =		0.0				

TOTAL OTHER OBJECTS		\$ 5.0
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S812	CYOP TITLE:	COASTAL COMMUNITIES BRANCH			
TASK#:	8L1C3A81	TASK TITLE:	COASTAL COMMUNITIES INVESTIGATION			DATE: 26-Jan-98
LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
SILBERBERG	KELLY	R	9	3	0.5	
ADAMS	PETER	B	13	4	0.5	QSI
BOWERS	MICHAEL	J	9	6	1	
LAIDIG	TOM	E	11	2	0.5	
TOTAL LABOR (\$K) (1100):						111.7
TOTAL PREMIUM PAY (1150):						4.0
TOTAL EC (1210):						23.5
TOTAL COLA (1213)						0.0
TOTAL AWARDS (1159)						0.0
TOTAL TRAINING (25XX)						0.5
TOTAL TASK (\$K):						139.7

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

TI812.822

S812	Lab/Div: Tiburon Laboratory	CYOP Title: Coastal Communities Branch
Prepared: December 3, 1997	Current Year Task #: 8L1C3A81	Task Title: Effects of Altered Habitats
Reader: Edmund Hobson	Prior Year Task #: 8L1C3A81	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
Field Operations	9.0		Contracts:	
			Equipment repair	2.0
Foreign:				
TOTAL TRAVEL =			9.0	

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 2.0		
		26	SUPPLIES (List major expenses)	COSTS
			Laboratory supplies	1.0
			Computer software	1.5
			Photo supplies	0.5
			Scuba air	1.5
			Miscellaneous	1.0
TOTAL TRANSPORTATION =			TOTAL SUPPLIES = 5.5	

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
			Miscellaneous	3.5
TOTAL R-C-U =			TOTAL EQUIPMENT = 3.5	

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O = 0.0	

PRINTING	COSTS			
TOTAL PRINTING =		TOTAL OTHER OBJECTS \$ 20.0		

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S812	CYOP TITLE:	COASTAL COMMUNITIES BRANCH	
TASK#:	8L2BRS82	TASK TITLE:	ESA SALMON--ASSESSMENT/LABOR	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
VICE	RES. FISH BIOL	E	12 1	1	
FISH	HEIDI	E	5 1	1	QSI

TOTAL LABOR (\$K) (1100):	71.9
TOTAL PREMIUM PAY (1150):	8.0
TOTAL EC (1210):	15.1
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.4
TOTAL TASK (\$K):	95.4

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

TI812.823

S812	Lab/Div: Tiburon Laboratory	CYOP Title: Coastal Communities Branch
Prepared: December 3, 1997	Current Year Task #: 8L2BRS82	Task Title: ESA Salmonids (PPA)
Reader: Peter Adams	Prior Year Task #: 8L2BRS82	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
Field operations	6.0		Contracts:	
Foreign:				
TOTAL TRAVEL =				
	6.0			
TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 0.0		
		26	SUPPLIES (List major expenses)	COSTS
			misc.	1.1
TOTAL TRANSPORTATION =				
	0.0			
RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
			computers (2)	9.5
			digital vcr	4.5
			electrofishing unit	3.5
TOTAL R-C-U =				
	0.0			
COMPUTER	COSTS	TOTAL EQUIPMENT = 17.5		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =				
	0.0			
PRINTING	COSTS	TOTAL G & C-O = 0.0		
TOTAL PRINTING =				
	0.0			

TOTAL OTHER OBJECTS	\$ 24.6
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC - 812

Lab/Div: Tiburon Laboratory

Page: 1

CYOP Title: Coastal Communities Branch

Leader: Edmund Hobson

Task Numbers 1st 8L1AGF80 2nd 8L1C3A81 3rd 8L2BRS82 4th _____

Task Budget Totals \$ 207.4 K \$ 159.7 K \$ 120.0 K \$ _____ K

CYOP Budget Totals:

Personnel: \$ 436.5 K Other Objects: \$ 50.6 K Total: \$ 487.1 K

1. Major Fisheries Associated with CYOP

1. West Coast Groundfish
2. West Coast Salmonids

2. Fishery Management or Recovery Plans Associated with CYOP

1. Lingcod Stock Assessment for Pacific Coast Fishery Management Council
2. Coho Biological Review Team and Recovery Plan
3. Steelhead Biological Review Team and Recovery Plan

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Marine communities of the Pacific coast have experienced profound changes in response to natural and anthropogenic alterations of their environment. These changes are of critical concern to resource managers, because most species sought by commercial and recreational fishermen in this area are elements of these communities. Activities associated with this CYOP provide an understanding of

these changes that is crucial to effective management. Changes under study include those resulting from the extended period of ocean warming that has developed in the eastern Pacific over the past 20 years, and also those resulting from shorter-term events, such as el ninos and severe storms. The major effort, however, is study of the effects of anthropogenic alterations of the environment on salmonid fishes that spawn in coastal streams. The severity of these effects and the relevance of this research are evident in that data produced by this CYOP have been used in designating certain of these species as threatened or endangered under the Endangered Species Act.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To identify effects of environmental change on groundfish and related species.
2. To identify effects of environmental change on recruitment success in *Sebastes* spp.
3. To develop statistically valid procedures to estimate abundance of coastal salmonids.
4. To investigate rates and causes of straying by both natural and hatchery salmonids
5. To investigate importance of estuaries to coastal salmonids.
6. To assess the fishery for lingcod in California.
7. To determine effects of harvesting lingcod, an apex predator, on coastal communities.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Effects of environmental change on coastal communities have been monitored at established sites for over 25 years. Regular assessments have been made using a variety of sampling devices and by visual records of underwater observers. Trophic relations have been determined based on visual observations and by study of diets, with results subjected to rigorous peer review. The salmonid projects, which are recent additions that involve both spawning adults and juveniles, similarly employ underwater visual observations and counts. Counts are also made from stream banks and electrofishing (for juveniles).

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

During the past 20 years there have been profound changes in California coastal habitats that can be attributed to ocean warming and intensified fishing. This project has produced data time-series that span this period to provide the *only* comprehensive measures of changes that have occurred in the near-shore communities. The salmonid elements of the project have a shorter history, but are projected to provide information needed to set, and to monitor progress toward, goals for recovery. These elements are also

designed to provide understanding of salmonid relations within their communities and their responses to anthropomorphic alterations of the environment.

Narrative and Summary--SWC - 812

Page:3

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The success of this project should be measured by the extent that it determines effects of the natural and anthropogenic forces experienced by California coastal habitats during the past two decades. Clients measure this success by their increased understanding of the processes involved, and by including the project's results in fishery management and recovery plans.

6. Products/Services

Major products include papers published in peer-reviewed journals, reports and stock-assessment documents presented to the Pacific Fishery Management Council.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients include fishery managers, California Department of Fish & Game, Northwest and Southwest Regions of NMFS, Pacific Fishery Management Council, endangered-species recovery-teams, and others with interest in understanding dynamics of aquatic ecosystems.

Suppliers include producers of environmental data, such as the National Weather Service, and fishery data supplied under contract by port samplers and by California state biologists.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Activities involve collaboration with the state fisheries agencies of California, Oregon and Washington, other NMFS facilities, particularly the Southwest Region and Northwest Center, and the University of Southern California's Catalina Marine Science Center.

CYOP Number: SWC - 812

Lab/Div: Tiburon Laboratory

Page: 1

Title: Coastal Communities Branch

Leader: Edmund Hobson

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C3A81	A	1	Assess 1998 year-class of <i>Sebastes</i> spp.	05/98	09/98
	A	2	Monitor long-term changes in coastal communities.	ongoing	
	A	3	Analyze data for trophic relations of deep-slope groundfishes.	ongoing	
	E	4	Present paper on recruitment processes in <i>Sebastes</i> spp. at Groundfish Conference.	02/98	
	M	5	Produce manuscript on predation/recruitment relations.		09/98
8L1AGF80	A	6	Investigate age and growth of lingcod.	ongoing	
	A	7	Coordinate port sampling of ling cod.	ongoing	
	E	8	Present paper on lingcod maturation at Groundfish Conference.	02/98	
8L2BRS82	M	9	Convene electrofishing workshop and produce report.	10/97	09/98
	A	10	Investigate straying of salmon in coastal streams.	ongoing	
	A	11	Evaluate and refine methods of sampling salmonids.	ongoing	
	A	12	Participate in developing recovery plans for salmon.	ongoing	

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S813	CYOP TITLE:	PHYSIOLOGICAL ECOLOGY BRANCH		
TASK#:	8L1C3A82	TASK TITLE:	PHYSIOLOGICAL ECOLOGY INVESTIGATION	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
ELDRIDGE	MAXWELL	B	14	0	1	
JARVIS	BRIAN	M	9	9	1	
MACFARLANE	ROBERT	B	13	6	1	
NORTON	ELIZABETH	C	9	3	1	

TOTAL LABOR (\$K) (1100):	228.0
TOTAL PREMIUM PAY (1150):	20.0
TOTAL EC (1210):	47.9
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.8
TOTAL TASK (\$K):	296.7

**SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA
(OTHER OBJECTS EXPENSES)**

TI813.820

P: S813		Lab/Div: Tiburon Laboratory		CYOP Title: Physiological Ecology Branch	
Prepared: December. 3, 1997		Current Year Task #: 8L1C3A82		Task Title: Salmon Physiological Ecology	
Leader: Manwell B. Eldridge		Prior Year Task #: 8L1C3A82			

	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:			Training:	
	Misc. travel	3.0		Contracts:	
				Sample collection	10.0
	Foreign:				
TOTAL TRAVEL =		3.0			
	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 10.0		
			26	SUPPLIES (List major expenses)	COSTS
				Misc. supplies	13.5
TOTAL TRANSPORTATION =		1.5	TOTAL SUPPLIES = 13.5		
	RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
				Misc. equipment	5.0
				computer equipment	10.0
				field monitoring equipment	10.0
TOTAL R-C-U =		0.0			
	COMPUTER	COSTS	TOTAL EQUIPMENT = 25.0		
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
TOTAL COMPUTER =		0.0	TOTAL G & C-O = 0.0		
	PRINTING	COSTS			
	Manuscript expenses	2.0			
TOTAL PRINTING =		2.0			

TOTAL OTHER OBJECTS	\$ 55.0
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC-813**Lab/Div:** TIBURON LABORATORY**Page:**1**CYOP Title:** Physiological Ecology Investigations**Leader:**Maxwell B. Eldridge**Task Numbers** 1st 8L1C3A82 2nd _____ 3rd _____ 4th _____**Task Budget Totals** \$ 351.7 K \$ _____ K \$ _____ K \$ _____ K**CYOP Budget Totals:**Personnel: \$ 295.9 K Other Objects: \$ 55.8 K Total: \$ 351.7 K**1. Major Fisheries Associated with CYOP**

1. Chinook salmon fishery

2. Fishery Management or Recovery Plans Associated with CYOP

1. Chinook salmon management plan

2. Sacramento-San Joaquin winter-run salmon recovery plan

NARRATIVE SECTION**1. Problem Statement** (What management or scientific problem or issue does this CYOP help solve?)

Fisheries managers need to understand how natural environmental factors, inherent life history traits, and management decisions can affect the persistence of fish stocks. This Branch examines functional relationships between fishes and their host environments. Research consists of multidisciplinary, integrated studies designed to determine the inherent and environmental factors affecting condition and health, growth, behavior, and reproduction. It also examines the extent to which environmental contaminants effect growth and survival during critical life stages.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To understand, describe and explain how fish respond to changes in their habitats, their capacity to adapt, and the implications these interactions have for management.

2. To contribute to the assessment of important fish stocks, evaluate their health and condition and reproductive potential, and forecast recruitment.
3. To determine the habitat utilization and physiological adaptive capacity of outmigrating juvenile salmon in central and northern California.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Studies conducted of important groundfish stocks over the past 16 years are near completion and will be submitted for publication and presented at relevant fora before the scientific community. Preliminary field studies of outmigrating juvenile and pre-adult salmon in estuarine and coastal habitats have been completed, and a standardized sampling and analytical protocol will be developed in the 1998 research year. This work is designed to collect juvenile salmonid specimens, their available food prey, and environmental data for habitat characterization. Laboratory analyses will help determine salmon physiological ecology (e.g., growth and condition, movements and migratory behavior, nutritional energy status, contaminant accumulation and effects, and food and feeding) and habitat utilization and requirements.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

Management of Pacific coast groundfish requires information on the condition of specific stocks and an understanding of what affects and determines recruitment variability. Continued declines of important stocks has placed emphasis on the importance of wise and efficient conservation and management. Only relevant research can provide information in support of this management. Listings of Pacific coast salmon stocks under the Endangered Species Act have increased in the last two years with more listings planned in the near future. Recovery of these stocks requires understanding of the factors causing their declines and the requirements for reversal of abundance trends. Research will contribute to this understanding and will help identify critical habitat requirements.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Success of this project will be achieved when relevant information is produced which helps identify the critical factors affecting recruitment variability and the description of critical habitat requirements.

6. Products/Services

Products of this research include written scientific reports and manuscripts, presentations at scientific meetings, conferences, lectures, and seminars. Products will contribute to understanding of the causes of fishery resource variability in abundance and distribution and efficient conservation and management. Secondary outcomes are expected to provide management with an efficient means to monitor health and

condition of stocks, measure reproductive output, estimate recruitment potential, and predict possible effects of management decisions and environmental conditions.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Primary users of the research products are managers and decision- and policymakers of the Pacific Fishery Management Committee (PFMC) and the NMFS Southwest Region concerned with management plans, protected species recovery plans, and habitat requirement descriptions. Other users include researchers and fishery managers who need to know what environmental factors influence fish growth, health, survival, behavior, and reproduction.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Collaborative research dealing with contaminant analyses is conducted with the NMFS Northwest Fisheries Science Center. Cooperative arrangements are also occurring with the University of California, Santa Cruz, the University of California, Davis, the U. S. Fish and Wildlife Service, California Department of Fish and Game, and the Interagency Ecology Program which consists of eight different state and federal agencies.

SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1998

CYOP Number: SWC - 813

Lab/Div: Tiburon Laboratory

Page: 1

Title: Physiological Ecology Branch

Leader: Maxwell B. Eldridge

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C3A82	A	1	Conduct field surveys of San Francisco Estuary and Gulf of Farallones for juvenile salmon, plankton, and environmental data.	10/97	11/98
	M	2	Establish standardized sampling protocol, including procedures, equipment, platforms, and seasons, for the study of juvenile salmon ecology in San Francisco Estuary and the Gulf of Farallones.		04/98
	A	3	Perform laboratory analyses of 1997 salmon specimens.	12/97	06/98
	M	4	Complete manuscript on the lipid class dynamics of yellowtail rockfish during the annual reproductive cycle.		04/98
	E	5	Make presentation at the AFS Biology of Fishes Conference.		07/98

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S814	CYOP TITLE:	SALMON ANALYSIS BRANCH		
TASK#:	8L1ARA85	TASK TITLE:	IMPROVE STOCK ASSESSMENT	DATE:	09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
PRAGER	MICHAEL	H	14 6	1	

TOTAL LABOR (\$K) (1100):	77.8
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	16.3
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	2.5
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	96.8

TI814.821

SC Financial Form #2 - Revised 8/97

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S814	CYOP TITLE:	SALMON ANALYSIS BRANCH			
TASK#:	8L2BRS80	TASK TITLE:	FOREST PLAN (PPA)			DATE: 09-Feb-98
LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
LINDLEY	STEVEN	T	12	2	1	
MOHR	MICHAEL	S	12	2	1	
TOTAL LABOR (\$K) (1100):						97.8
TOTAL PREMIUM PAY (1150):						0.0
TOTAL EC (1210):						20.6
TOTAL COLA (1213)						0.0
TOTAL AWARDS (1159)						2.3
TOTAL TRAINING (25XX)						0.4
TOTAL TASK (\$K):						121.1

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

TI814.823

S814	Lab/Div: Tiburon Laboratory	CYOP Title: Salmon Analysis Branch
Prepared: December 3, 1997	Current Year Task #: 8L2BRS80	Task Title: Forest Plan (PPA)
Leader: Michael Prager	Prior Year Task #: 8L2BRS80	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	
			Duke Univ. for isotopic analysis in support of	
			estimation of historic salmon run sizes	50.0
Foreign:				
TOTAL TRAVEL =			0.0	
TRANSPORTATION OF THINGS			COSTS	
			TOTAL CONTRACTS = 50.0	
TOTAL TRANSPORTATION =			0.0	
RENTS, COMM., UTIL			COSTS	
			TOTAL SUPPLIES = 0.4	
TOTAL R-C-U =			0.0	
COMPUTER			COSTS	
Gov. Owned/Leased:			TOTAL EQUIPMENT = 0.0	
Contracted:				
TOTAL COMPUTER =			0.0	
PRINTING			COSTS	
			TOTAL G & C-O = 0.0	
TOTAL PRINTING =			0.0	

TOTAL OTHER OBJECTS	\$ 50.4
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S814	CYOP TITLE:	SALMON ANALYSIS BRANCH	
TASK#:	8L2BRS81	TASK TITLE:	ESA SALMON-ANALYSIS/LABOR	DATE: 09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
SPENCER	PAUL	D	12 1	1	

TOTAL LABOR (\$K) (1100):	47.5
TOTAL PREMIUM PAY (1150):	0.8
TOTAL EC (1210):	10.0
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	58.5

(OTHER OBJECTS EXPENSES)

TI814.824

TOTAL OTHER OBJECTS	\$ 80.0
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

TI814.830

CYOP Number: SWC - S814

Lab/Div: TIBURON LABORATORY

Page:1

CYOP Title: Salmon Analysis Branch

Leader: Michael Prager

Task Numbers 1st 8L1ARA85 2nd 8L1C3A83 3rd 8L2BRS80 4th 8L2BRS81

Task Budget Totals \$ 106.8 K \$ 72.9 K \$ 171.5 K \$ 138.5 K

CYOP Budget Totals:

Personnel: \$ 348.3 K Other Objects: \$ 141.4 K Total: \$ 489.7 K

1. Major Fisheries Associated with CYOP

1. Ocean chinook salmon fisheries (Klamath and Central Valley).
2. River chinook salmon fisheries (recreational and tribal).
3. Coho and steelhead recreational fisheries (if any).

2. Fishery Management or Recovery Plans Associated with CYOP

1. Winter-run chinook recovery plan.
2. Coho salmon recovery plan (not yet written).
3. Chinook salmon recovery plan (not yet written).
4. Steelhead recovery plan (not yet written).

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Provide decision-makers with analytical advice concerning assessment and/or recovery of California salmonid stocks.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To provide SWR and NMFS with timely and appropriate model-based estimates of potential impacts on listed and nonlisted salmonid stocks, primarily in California.
2. To provide SWR and NMFS with timely and thorough reviews of documents relating to ESA permits or actions on salmonid stocks, primarily in California.
3. To assist fishery management councils, NMFS Regional Office, technical teams, and similar bodies with assessment and other modeling of exploited salmonid stocks, primarily in California.
4. To advance the state of quantitative scientific knowledge of salmonid stocks, primarily in California.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

Computer modeling and statistical analysis; also, some field and lab studies through contracts and cooperative work.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

This project supports elements of the Sustainable Fisheries Act and the Endangered Species Act.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

Participation in ESA Panels and Teams; improvement of salmonid stock assessment models; cooperative working agreement with SWR; publication of results in refereed and non-refereed literature.

6. Products/Services

Model results, document reviews, technical reports, publications.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients: Pacific Fishery Management Council, Klamath Fishery Management Council, various NMFS Biological Review Teams and other *ad hoc* ESA panels, NMFS SWR, States of California, Oregon, and Washington.

Suppliers: Pacific Fishery Management Council, Klamath Fishery Management Council, various NMFS Biological Review Teams and other *ad hoc* ESA panels, NMFS SWR, States of California, Oregon, and Washington, SWFSC, NWFSC, NMFS PFEL.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Project is coordinated through PFMC, KFMC, SWFSC, and SWR to most or all Pacific-coast Federal and State fisheries laboratories and agencies. Also, cooperative work is ongoing or anticipated with Humboldt State University and Duke University. Within the Tiburon/Santa Cruz Lab, work is linked with Physiological Ecology Branch (CYOP S813), Groundfish Analysis Branch (S811), and Coastal Communities Branch (S812).

CYOP Number: SWC - S814

Lab/Div: Tiburon Laboratory

Page: 1

Title: Salmon Analysis Branch

Leader: Michael Prager

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1ARA85 8L2BRS80	A	1	Participate in Klamath River Technical Advisory Team of Klamath Fishery Management Council.	ongoing	
8L1C3A83	A	2	Provide economic guidance and design for Pacific Coast Angler Survey.	ongoing	
8L1C3A83	A	3	Serve on Scientific and Statistical Committee of PFMC.	ongoing	
8L1C3A83	M	4	Finalize economics questionnaire for Pacific Coast Angler Survey.	10/97	01/98
8L1C3A83	A	5	Provide economic advice to SWR and other NMFS bodies.	ongoing	
8L1C3A83	A	6	Serve as SWFSC member of RecFIN (State-Federal committee on recreational fisheries data collection).	ongoing	
8L2BRS80 8L2BRS81	A	7	Review scientific and statistical material as appropriate for SWR.	ongoing	
8L2BRS80	A	8	Serve on Salmon Technical Team of PFMC.	ongoing	
8L2BRS80 8L2BRS81	A	9	Participate in chinook, coho, and steelhead Biological Review Teams, Recovery Teams, and similar bodies.	ongoing	
8L2BRS80 8L2BRS81	A	10	Provide scientific advice to SWR on population dynamics.	ongoing	
8L2BRS80	M	11	Complete comprehensive revision of Klamath Ocean Harvest Model and issue (through KRTAT) a report documenting it.		06/98

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S821	CYOP TITLE:	TL SCIENCE SUPPORT
TASK#:	8L1ARA86	TASK TITLE:	STOCK ASSESSMENT
			DATE: 10-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
VICE	DIRECTOR	E	15 0	0.5	

TOTAL LABOR (\$K) (1100):	39.2
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	8.2
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.1
TOTAL TASK (\$K):	47.5

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

TI821.821

S821	Lab/Div: Tiburon Laboratory	CYOP Title: Tiburon Laboratory Science Support
Prepared: December 3, 1997	Current Year Task #: 8L1ARA86	Task Title: Stock Assessment (PPA)
Reader: Laboratory Director	Prior Year Task #: 8L1ARA85	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	9.0		Training:	2.0
			Contracts:	
Foreign:				
TOTAL TRAVEL =				2.0
9.0				

TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
			Software and miscellaneous	2.9
TOTAL TRANSPORTATION =				2.9
0.0				

RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
TOTAL R-C-U =				0.0
0.0				

COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =				0.0
0.0				

PRINTING	COSTS	TOTAL G & C-O =	0.0
TOTAL PRINTING =			
0.0			

TOTAL OTHER OBJECTS	\$ 13.9
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SOUTHWEST FISHERIES SCIENCE CENTER**CYOP FINANCIAL DATA****(PERSONNEL)****FY 1998**

CYOP:	S821	CYOP TITLE:	TL SCIENCE SUPPORT		
TASK#:	8L1C3A84	TASK TITLE:	INFORMATION TECHNOLOGY & PLANNING	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
MAYO (VICE CS)	CHARLES	R	12 1	0.9	

TOTAL LABOR (\$K) (1100):	43.9
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	9.2
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	53.3

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

TI821.822

: S821	Lab/Div: Tiburon Laboratory	CYOP Title: Tiburon Laboratory Science Support
Prepared: December 3, 1997	Current Year Task #: 8L1C3A84	Task Title: Information Technology and Research Planning
Leader: Laboratory Director	Prior Year Task #: 8L1C3A83	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:	5.0		Training:	6.0
			Contracts:	
			Sun computer maintenance and upgrades	8.0
Foreign:	4.0			
TOTAL TRAVEL =			9.0	

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 14.0		
		26	SUPPLIES (List major expenses)	COSTS
			Computer software and miscellaneous	5.0
TOTAL TRANSPORTATION =			0.0	

RENTS, COMM., UTIL	COSTS	TOTAL SUPPLIES = 5.0		
Rent—Santa Cruz	3.0	31	EQUIPMENT (List major items)	COSTS
Rent—Bodega Bay	4.0		Computer equipment	20.0
TOTAL R-C-U =			7.0	

COMPUTER	COSTS	TOTAL EQUIPMENT = 20.0		
Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
Contracted:				
TOTAL COMPUTER =			0.0	

PRINTING	COSTS	TOTAL G & C-O = 0.0		
	2.0			
TOTAL PRINTING =		2.0		

TOTAL OTHER OBJECTS	\$ 57.0
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S821	CYOP TITLE:	TL SCIENCE SUPPORT	
TASK#:	8L1C3A86	TASK TITLE:	TIBURON LIBRARY	DATE: 26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
PENN	GARETH	S	9 4	0.8	

TOTAL LABOR (\$K) (1100):	29.7
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	6.2
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	36.1

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

TI821.823

S821	Lab/Div: Tiburon Laboratory	CYOP Title: Tiburon Laboratory Science Support
Prepared: December 3, 1997	Current Year Task #: 8L1C3A86	Task Title: Library
Prepared by: Laboratory Director	Prior Year Task #: 8L1C3A86	

TRAVEL	COSTS	25	CONTRACTS	COSTS
Domestic:			Training:	
			Contracts:	3.0
Foreign:				
TOTAL TRAVEL =				0.0

TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =	
			3.0
TOTAL TRANSPORTATION =			0.0

RENTS, COMM., UTIL	COSTS	26	SUPPLIES (List major expenses)	COSTS
			Books and periodicals	20.0
			Miscellaneous	1.0
TOTAL R-C-U =				0.0

COMPUTER	COSTS	31	EQUIPMENT (List major items)	COSTS
Gov. Owned/Leased:				
Contracted:				
TOTAL COMPUTER =				0.0

PRINTING	COSTS	TOTAL EQUIPMENT =	
			0.0
TOTAL PRINTING =			0.0

GRANTS & CO-OP AGREEMENTS	COSTS	TOTAL G & C-O =	
			0.0

TOTAL OTHER OBJECTS	\$24.0
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**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

TI821.830

Narrative and Summary

CYOP Number: SWC - S821
1

Lab/Div: Tiburon Laboratory

Page:

CYOP Title: Tiburon Laboratory Science Support

Leader: Laboratory Director

Task Numbers 1st: 8L1ARA86 2nd: 8L1C3A84 3rd: 8L1C3A86

Task Budget Totals \$ 61.4 K \$ 110.3 K \$ 60.1 K

CYOP Budget Totals:

Personnel: \$ 136.4 K Other Objects: \$ 95.4 K Total: \$ 231.8 K

1. Major Fisheries Associated with CYOP

1. All Pacific groundfish fisheries.
2. All Pacific salmon fisheries.

2. Fishery Management or Recovery Plans Associated with CYOP

1. All Pacific Fishery Management Council stocks.
2. All endangered runs of chinook and coho salmon and steelhead trout.

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Contributes to functions of all other science CYOP's at Tiburon/Santa Cruz Laboratory.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To ensure quality of Tiburon/Santa Cruz Lab science.

2. To contribute to Tiburon/Santa Cruz Lab science.

Narrative and Summary--SWC-821

Page:2

3. To provide needed scientific facilities (e.g., computer, library) for conduct of Tiburon/Santa Cruz Lab Science

3. **Methodology/Approach** (How are the objectives being approached: what are the tactics that are being applied?)

4. **Why is this project important?** (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

5. **Measure of Success** (How should success of this project be measured? How do clients receiving goods or services measure your success?)

6. **Products/Services**

7. **Clients/Suppliers** (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

Clients
Suppliers

8. **Important Linkages** (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Leader: Laboratory Director

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

[illegible]

*Pacific Fisheries Environmental
Laboratory*

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S900	CYOP TITLE:	ESA RECOVERY - F/PR FUNDS - PFEL		
TASK#:	8L2BRS90	TASK TITLE:	ESA SALMON	DATE:	09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
VICE	OCEANOGRAPHER	E	12 5	0.76	

TOTAL LABOR (\$K) (1100):	38.4
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	8.3
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	46.9

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

:S900		Lab/Div: PFEL		CYOP Title:ESA Salmon	
Prepared:12/2/97		Current Year Task #:8L2BRS90		Task Title:Ocean Variability & Salmon Survival	
Leader:G. Boehlert		Prior Year Task #:8L2BRS90			

	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:	7.0		Training:	
				Contracts:	
				Tag evaluation	10.0
	Foreign:				
TOTAL TRAVEL =		7.0			

	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 10.0		
	Shipping	1.0	26	SUPPLIES (List major expenses)	COSTS
				Software licenses	4.2
				Computer peripherals	2.0
				Misc supplies	0.7
TOTAL TRANSPORTATION =		1.0		TOTAL SUPPLIES = 6.9	

	RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
				Workstation computer	9.0
TOTAL R-C-U =					

	COMPUTER	COSTS	TOTAL EQUIPMENT = 9.0		
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
TOTAL COMPUTER =					

	PRINTING	COSTS	TOTAL G & C-O =		
	Publication	1.475			
TOTAL PRINTING =		1.475			

TOTAL OTHER OBJECTS	\$35.4
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S901	CYOP TITLE:	FISHERIES OCEANOGRAPHY & ECOSYSTEMS - PFEL		
TASK#:	8L1C1CPL	TASK TITLE:	FISHERIES INFO. TECHNOLOGY - PFEL	DATE:	09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
STROUD	ARTHUR	D	12 10	0.7	

TOTAL LABOR (\$K) (1100):	41.0
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	9.0
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.0
TOTAL TASK (\$K):	50.0

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S901	CYOP TITLE:	FISHERIES OCEANOGRAPHY & ECOSYSTEMS - PFEL		
TASK#:	8L1C5B90	TASK TITLE:	FISHERY OCEANOGRPHY & ECOSY	DATE:	09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
BOEHLERT	GEORGE	W	15 0	1	
LUTHY	RENE	M	7 1	1	
NICHOLS	COLLEEN	M	7 4	0.8	

TOTAL LABOR (\$K) (1100):	147.4
TOTAL PREMIUM PAY (1150):	1.0
TOTAL EC (1210):	31.0
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	1.4
TOTAL TRAINING (25XX)	0.6
TOTAL TASK (\$K):	181.4

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

P: 901		Lab/Div: PFEL		CYOP Title: Fisheries Oceanography & Ecosystems	
Prepared: 12/2/97		Current Year Task #: 8L1C5B90		Task Title: Fisheries Oceanography & Ecosystems	
Leader: Boehlert		Prior Year Task #: 8L1C5B90			

1	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:	10.2		Training:	
				Contracts:	
				Building maintenance	3.0
				Facility maintenance	10.8
	Foreign:	4.0		Janitorial services	8.0
				Grounds maintenance	5.0
				Casual labor	10.0
				Graduate student support	12.0
TOTAL TRAVEL =		14.2			

2	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS = 48.8		
	Vehicle	1.4	26	SUPPLIES (List major expenses)	COSTS
	Federal Express	1.0		Office Supplies	5.2
				Journals, books	2.0
				Software, upgrades	10.0
				Graphics, illustration	2.5
				Maintenance supplies	5.0
TOTAL TRANSPORTATION =		2.4	TOTAL SUPPLIES = 24.7		

3	RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
	Telephone (local, long distance, internet)	13.0		Power PC Computer	7.0
	Utilities (gas, water, electric, sewer, disposal)	25.3		Printer	1.3
	Copier maintenance	2.0		Furnishings/partitions	7.8
	Building security	2.0		Computer peripherals	4.0
TOTAL R-C-U =		42.3			

C	COMPUTER	COSTS	TOTAL EQUIPMENT = 20.1		
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =		

4	PRINTING	COSTS			
	Tech memos, reprints	6.0			
TOTAL PRINTING =		6.0			

TOTAL OTHER OBJECTS	\$158.5
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S901	CYOP TITLE:	FISHERIES OCEANOGRAPHY & ECOSYSTEMS - PFEL
TASK#:	8L1C5B91	TASK TITLE:	FISHERY ENVIRONMENT
		DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
MASON	JANET	E	9	6	0.88	
PARRISH	RICHARD	H	14	0	1	
YOKLAVICH	MARY	M	12	3	1	

TOTAL LABOR (\$K) (1100):	165.5
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	34.8
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.6
TOTAL TASK (\$K):	200.9

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

CYOP: 901		Lab/Div: PFEL		CYOP Title: Fisheries Oceanography & Ecosystems	
Date Prepared: 12/2/97		Current Year Task #: 8L1C5B91		Task Title: Fisheries Environment	
Task Leader: R. Parrish		Prior Year Task #: 8L1C5B91			

21	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:	6.5		Training:	
				Contracts:	
				Habitat Assessment Analysis	5.0
	Foreign:	1.5			
	TOTAL TRAVEL =				
		8.0		TOTAL CONTRACTS =	
					5.0

22	TRANSPORTATION OF THINGS	COSTS	26	SUPPLIES (List major expenses)	COSTS
				Supplies/software upgrades	4.0
	TOTAL TRANSPORTATION =			TOTAL SUPPLIES =	
					4.0

23	RENTS, COMM., UTIL	COSTS	31	EQUIPMENT (List major items)	COSTS
				Computer equipment/optical drive	3.0
	TOTAL R-C-U =				
				TOTAL EQUIPMENT =	
					3.0

23C	COMPUTER	COSTS	41	GRANTS & CO-OP AGREEMENTS	COSTS
	Gov. Owned/Leased:				
	Contracted:				
	TOTAL COMPUTER =			TOTAL G & C-O =	

24	PRINTING	COSTS			
	Scientific Publications	2.0			
	TOTAL PRINTING =				
		2.0			

TOTAL OTHER OBJECTS	\$22.0
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SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S901	CYOP TITLE:	FISHERIES OCEANOGRAPHY & ECOSYSTEMS - PFEL		
TASK#:	8L1C5B92	TASK TITLE:	FISHERY CLIMATOLOGY	DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
MENDELSSOHN	ROY		14 0	1	

TOTAL LABOR (\$K) (1100):	79.6
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	16.7
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	96.5

SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998

CYOP:	S901	CYOP TITLE:	FISHERIES OCEANOGRAPHY & ECOSYSTEMS - PFEL
TASK#:	8L1C5B93	TASK TITLE:	PHYSICAL OCEANOGRAPHY
		DATE:	26-Jan-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
NORTON	JERROLD	G	12 7	1	
SCHWING	FRANKLIN	B	14 2	1	

TOTAL LABOR (\$K) (1100):	123.9
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	26.0
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.4
TOTAL TASK (\$K):	150.3

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

CYOP: 901		Lab/Div: PFEL		CYOP Title: Fisheries Oceanography & Ecosystems	
Date Prepared: 12/2/97		Current Year Task #: 8L1C5B93		Task Title: Physical Oceanography	
Task Leader: F. Schwing		Prior Year Task #: 8L1C5B93			

21	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:	7.5		Training:	
				Contracts:	
	Foreign:				
TOTAL TRAVEL =		7.5			
22	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
			26	SUPPLIES (List major expenses)	COSTS
				Supplies/software upgrades	4.0
				CTD repair gear	1.0
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =		
23	RENTS, COMM., UTIL		31	EQUIPMENT (List major items)	COSTS
				Computer equipment	4.0
TOTAL R-C-U =			TOTAL EQUIPMENT =		
23C	COMPUTER	COSTS	TOTAL EQUIPMENT =		
	Gov. Owned/Leased:		4.0		
			41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =		
24	PRINTING	COSTS			
	Tech memos/page charges	4.0			
TOTAL PRINTING =		4.0			

TOTAL OTHER OBJECTS	\$20.5
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**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S901	CYOP TITLE:	FISHERIES OCEANOGRAPHY & ECOSYSTEMS - PFEL		
TASK#:	8L1C5B94	TASK TITLE:	NMFS IT FUNDING (FROM BASE) - PFEL	DATE:	09-Feb-98

LAST NAME	FIRST	M	GRADE/STEP	FTE	NOTES
STROUD	ARTHUR	D	12 10	0.3	

TOTAL LABOR (\$K) (1100):	17.9
TOTAL PREMIUM PAY (1150):	0.0
TOTAL EC (1210):	3.8
TOTAL COLA (1213)	0.0
TOTAL AWARDS (1159)	0.0
TOTAL TRAINING (25XX)	0.2
TOTAL TASK (\$K):	21.9

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 4
FY 1998**

Narrative and Summary

CYOP Number: SWC -901

Lab/Div: PFEL

Page: 1

CYOP Title: Fisheries Oceanography and Ecosystems

Leader: G. Boehlert

Task Numbers	1st <u>8L1C5B90</u>	2nd <u>8L1C5B91</u>	3rd <u>8L1C5B92</u>	4th <u>8L1C5B93</u>
	5th <u>8L1C5B94</u>	6th <u>8L1C1CPL</u>		
Task Budget Totals	\$ <u>339.9</u> K	\$ <u>222.9</u> K	\$ <u>105.5</u> K	\$ <u>170.8</u> K
	\$ <u>21.9</u> K	\$ <u>50.0</u>		

CYOP Budget Totals:

Personnel: \$ 699.0 K Other Objects: \$ 212.0 K Total: \$ 911.0 K

1. Major Fisheries Associated with CYOP

1. Coastal Pelagics
2. West Coast Groundfish
3. Pacific salmonids
4. Large Pelagics

2. Fishery Management or Recovery Plans Associated with CYOP

1. Coastal Pelagics
2. West Coast Groundfish
3. Pacific Salmonids

NARRATIVE SECTION

1. Problem Statement (What management or scientific problem or issue does this CYOP help solve?)

Natural variability in physical and biological systems interacts with effects of human actions in controlling the dynamics of fishery resource populations. The Pacific Fisheries Environmental Laboratory conducts research to improve the understanding of causes of variability in marine ecosystems at varied time and space scales and works to apply this knowledge to practical problems in marine resources and marine ecosystems, including applications to essential fish habitat.

2. Objectives (What are the major objectives being pursued by this CYOP?)

1. To specify linkages of environmental processes to population dynamics of important fish stocks and the ecosystems that support them.
2. To develop the means to effectively forecast effects of environmental variations (including global climate change) and oceanographic processes on availability of fish and on resilience of fish populations to exploitation.
3. To provide appropriate environmental data and information to other fishery scientists and managers
4. To develop new approaches and technologies to characterize and evaluate essential marine fisheries habitat.

3. Methodology/Approach (How are the objectives being approached: what are the tactics that are being applied?)

An integrated, interdisciplinary approach addresses these problems at varying time and space scales and includes i) diagnostic studies of ocean and atmospheric variability and ecological anomalies, ii) identification of causal linkages between the environment and biological variability, iii) development of fishery modelling methodology incorporating environmental factors, and iv) in situ and remote sensing studies of fisheries habitat relative to biological assemblages. Environmental and biological time series are developed, verified, and evaluated. The research is international in scope.

4. Why is this project important? (What strategic plan, mandate or authority supports this project's selection? Why was this problem chosen to be addressed; how is its importance/priority determined?)

The research in this project provides fisheries scientists and managers the means to effectively deal with the numerous fishery-environmental concerns of the government and the fishing industry. As an example, lack of understanding of the factors controlling recruitment variation, often considered largely environmental, is considered the major scientific problem hindering effective management of fishery resources. In addition, enhanced understanding of environmental effects on fish distribution is of economic value to the U.S. fishing industry. Predicting the effects of climate change on fish populations requires both reasonable scenarios on how the ocean/atmosphere system might change, and an understanding of how these factors influence fish.

5. Measure of Success (How should success of this project be measured? How do clients receiving goods or services measure your success?)

The measure of success for the scientific research is initially seen in the output of scientific publications and reports. A more meaningful analysis is the degree to which the analysis of environmental information is incorporated into resource models and ultimately, management decisions affecting harvest or management of protected resources. The measure of success for the environmental data products

from PFEL is the degree to which they are utilized by fisheries scientists in NMFS, other state and federal agencies, academia, and internationally to examine marine resource issues.

6. Products/Services

Scientific publications and technical reports are disseminated through the scientific literature. PFEL also compiles, updates, and distributes selected environmental data products (such as the upwelling index) of utility to fisheries and oceanographic researchers throughout the world.

7. Clients/Suppliers (Who uses the outputs or services? Upon whom is the project dependent for inputs?)

PFEL data products are used by government, academic, and private sector researchers in support of resource and oceanographic related research. Scientific manuscripts are used by other researchers, government scientists and managers, regulatory agencies, and others interested in the effects of the environment on ecosystems and marine resources. PFEL works closely with the US Navy for supply of important environmental data and with colleagues in fisheries agencies for biological data.

8. Important Linkages (With whom is the CYOP coordinated? Indicate collaboration with other facilities, personnel, budgets, agencies.)

Collaborative research is undertaken with other NMFS and NOAA scientists, including within the SWFSC and NWFSC, academic scientists, the California Department of Fish and Game, U.S. Navy, and the U.S. Geological Survey as well as with international scientists. PFEL data products are routinely provided to NOAA scientists, including at all NMFS Centers, other government agencies, academic scientists, and international scientists. Extensive coordination with the U.S. Navy's Fleet Numerical Meteorology and Oceanography Center promotes dual use of environmental data bases.

**SOUTHWEST FISHERIES SCIENCE CENTER
CURRENT YEAR OPERATING PLAN - FORM 5
FY 1998**

CYOP Number: SWC - 901

Lab/Div: PFEL

Page: 1

Title: Fisheries Oceanography and Ecosystems

Leader: G. Boehlert

MILESTONES, EVENTS AND ACTIVITIES SECTION

(For each Task # indicate M = Milestone, E = Event, A = Activity, Sequence #, Description of the Activity, Event or Milestone and the approximate dates of starting and finishing an Activity. Milestone and event dates should be indicated in the date finish column. Use additional pages if required.)

Task #	MEA	Seq #	Major Milestone, Event or Activity Description	Date Start	Date Finish
8L1C5B90	A	1	Develop cooperative research with USGS for characterization of groundfish habitat.		
8L1C5B90	E	2	Complete planning document for estuarine and ocean research on salmonids for west coast (rotational assignment activity).		June
8L1C5B90	E	3	Complete manuscript on fine-scale distribution of ichthyoplankton and zooplankton around the pycnocline.		August
8L1C5B91	A	4	Development of environment-dependent fishery modeling methodology.		
3L1C5B91	M	5	Develop spatial sardine fishery simulation model for assessment of management options for the CPS Fishery Management Plan.		August
8L1C5B91	A	6	Serve as a member of the Coastal Pelagic Species Fishery Management Plan Development Team.		
8L1C5B91	M	7	Complete Section 1.0 "Description of the Coastal Pelagic Fishery" of the CPS Management Plan.		May
8L1C5B91	A	8	Develop Geographical Information System applicable to fishery management and groundfish habitat.		
8L1C5B91	M	9	Publish manuscript "Mapping Benthic Habitats and Ocean Currents In The Vicinity of Central California's Big Creek Ecological Reserve" as NOAA Technical Memorandum.		December

8L1C5B91	M	10	Complete manuscript of "The Proceedings of the Workshop: Marine Harvest Refugia For West Coast Rockfish".		March
8L1C5B91	A	11	Conduct surveys of benthic fishes and verify habitat maps in the vicinity of the Big Creek Ecological Reserve, using a manned submersible and funding from CA Sea Grant.		October
8L1C5B91	E	12	Complete semi-annual report(s) of first year's research on "Deepwater Habitat and Fish Resources Associated with a Marine Ecological Reserve: Implications For Fisheries Management".	Nov.	April
8L1C5B91	M	13	Publish manuscript documenting "Changes in the sizes of rockfishes in 30 years of recreational fishing in Monterey Bay".		December
8L1C5B91	A	14	Participate on organizational committee for 1998 Western Groundfish Conference.		
8L1C5B92	A	15	Maintain PFEL IT-95 UNIX server, workstations, and LAN.		
8L1C5B92	A	16	Develop and maintain automated procedures for handling data transfers.		
8L1C5B92	E	17	Develop Database System for Near Real-Time Monthly Surface Data.		January
8L1C5B92	E	18	Develop Database System for Near Real-Time Monthly Subsurface Data.		May
8L1C5B92	E	19	Develop database system to allow rapid and customized access to available global subsurface datasets for creating time series for retrospective research on climate change.		June
8L1C5B92	M	20	Complete CD-ROM version of COADS Release 1a,b and related extraction programs.		March
8L1C5B92	A	21	Analysis of temporal and spatial variability of North Pacific wind, sea level, temperature and salinity.		
8L1C5B93	M	22	Revise manuscript "Seasonal and interannual variability of currents and water mass characteristics in the Gulf of the Farallones" for publication in Deep-Sea Research.		Dec. 98
8L1C5B93	A	23	Investigation of mean and time-varying mesoscale circulation off central California and its influence on groundfish recruitment (w/ Tiburon).		
8L1C5B93	A	24	Maintain and analyze CTD and ADCP database from Tiburon groundfish surveys.		
8L1C5B93	A	25	Continue and update monthly processing and distribution of standard PFEL products and databases, including upwelling index.		
8L1C5B93	E	26	Develop upwelling index time series and other environmental data products for all major eastern boundary current systems.		March
8L1C5B93	E	27	Publish tech memos on groundfish survey hydrographic and ADCP data-1997 (w/ Tiburon).		September
8L1C5B93	E	28	Invited speaker at American Meteorological Society Conference on Coastal Atmospheric and Oceanic Prediction and Processes.		January

[illegible]

Miscellaneous/Refundable

**SOUTHWEST FISHERIES SCIENCE CENTER
CYOP FINANCIAL DATA
(PERSONNEL)
FY 1998**

CYOP:	S173	CYOP TITLE:	WESTPACFIN - HONOLULU			
TASK#:	8L1C1A75	TASK TITLE:	WPACFIN			DATE: 26-Jan-98
LAST NAME	FIRST	M	GRADE/STEP		FTE	NOTES
KIKKAWA	BERT	S	9	6	1	
QUACH	MICHAEL	M	11	3	1	QSI
HAMM	DAVID	C	12	10	0.5	
TOTAL LABOR (\$K) (1100):						102.6
TOTAL PREMIUM PAY (1150):						0.0
TOTAL EC (1210):						21.6
TOTAL COLA (1213)						23.1
TOTAL AWARDS (1159)						0.0
TOTAL TRAINING (25XX)						0.5
TOTAL TASK (\$K):						147.8

SOUTHWEST FISHERIES SCIENCE CENTER--CYOP FINANCIAL DATA (OTHER OBJECTS EXPENSES)

CYOP: S173		Lab/Div: Honolulu Laboratory		CYOP Title: WPACFIN	
Date Prepared: 11/18/97		Current Year Task #: 8L1C1A75		Task Title: WPACFIN	
Task Leader: Hamm		Prior Year Task #: 8L1C1A75			

21	TRAVEL	COSTS	25	CONTRACTS	COSTS
	Domestic:	4,000		Training:	
				Contracts:	
	Foreign:				
TOTAL TRAVEL =		4,000			
22	TRANSPORTATION OF THINGS	COSTS	TOTAL CONTRACTS =		
			26	SUPPLIES (List major expenses)	COSTS
				Computer Software/Supplies	3,000
TOTAL TRANSPORTATION =			TOTAL SUPPLIES =		
23	RENTS, COMM., UTIL		3,000		
			31	EQUIPMENT (List major items)	COSTS
				Computer Upgrades	1,000
TOTAL R-C-U =			TOTAL EQUIPMENT =		
23C	COMPUTER	COSTS	1,000		
	Gov. Owned/Leased:		41	GRANTS & CO-OP AGREEMENTS	COSTS
	Contracted:				
TOTAL COMPUTER =			TOTAL G & C-O =		
24	PRINTING	COSTS			
TOTAL PRINTING =					

TOTAL OTHER OBJECTS	8,000
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